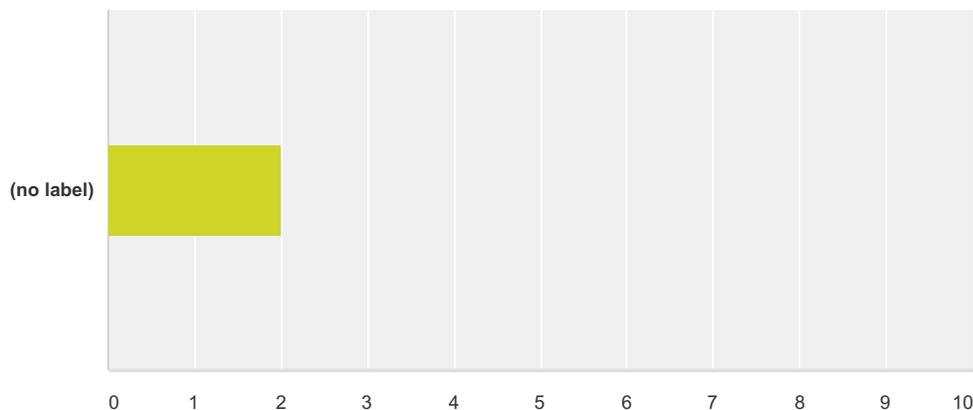


Q3 The standards in this strand are developmentally appropriate.

Answered: 76 Skipped: 184



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	48.68% 37	18.42% 14	15.79% 12	17.11% 13	76	2.01

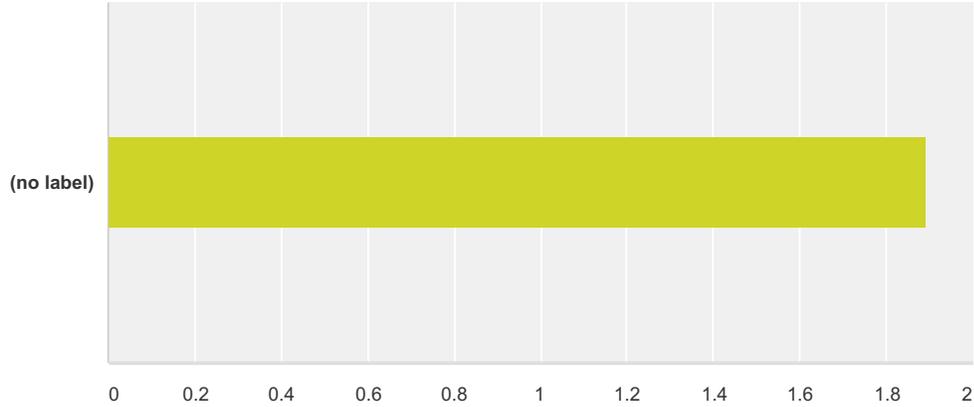
#	Suggested revisions for standards:	Date
1	Anything that says "develop a model" in fifth grade, doesn't capture what is needed which is to interpret information from a model. So "develop a model" is not a skill, but simply a task. Anyone can develop a model without being able to demonstrate true understanding. I feel this way regarding all science strands that have "develop a model". This turns the curriculum into a pinterest crayola show or a poster driven science class. Interpreting a model would be more beneficial.	12/2/2015 10:42 PM
2	These standards seem to be all over the place.	12/2/2015 7:39 PM
3	It is too difficult to make a comment.	12/2/2015 4:29 PM
4	Verbiage is extremely unclear.	12/1/2015 6:45 PM
5	In Kindergarten, it should be about classifying and the attributes of matter. Such as comparing solids and liquids, mixing colors, using your five senses.	12/1/2015 12:07 PM
6	Teachers will need PD in understanding how to read the NGSS vs. our current SC MLS.	12/1/2015 9:17 AM
7	Understanding matter is critical for preparing for Chemistry. Students who have a weak foundation in physical science do not pursue advanced coursed in secondary setting. Grade 2 should contain the bulk of physical property standards PS1.A Grade 5 should build on these and include chemical reactions PS1.B Understanding matter as it relates to solutions, mixtures and pieces you can not see is abstract. It is important that the bulk of this entire strand, and should sit solidly in grade 5.	12/1/2015 7:13 AM
8	The students in fifth grade will not have adequate background knowledge of the events leading to Declaration of Independence. 4th graders are not developmentally ready to internalize the concepts in the Declaration of Independence	11/30/2015 3:12 PM
9	lack of depth/too general	11/30/2015 3:11 PM
10	Not enough depth or substance	11/30/2015 3:08 PM
11	Missing chemical changes	11/30/2015 11:11 AM

HB1490 Work Group - Science K-5

12	"Scientific Method" seems to have played such a significant role in the 5th grade Science curriculum in years past (including such things as formulating a hypothesis, conducting experiments, identifying independent/dependent variables, conducting fair and unbiased tests, evaluating reasonableness of explorations and making suggestions for reasonable improvements, using quantitative and qualitative analysis to collect data, taking measurements, choosing and using proper tools and equipment, communicating procedures and results). Not sure how or where this fits into the categories of Life, Earth, or Physical Science, but concerned for it not being there at all, especially considering statewide assessments (standardized testing) at the 5th grade level.	11/23/2015 1:13 AM
13	Standards are way too broad.	11/16/2015 2:45 PM
14	I like how science Standards have go back to the old school standards.	11/13/2015 2:24 PM
15	Ps1-A structure and Properties of Matter These skills don't make sense for 5th grade students	11/13/2015 1:56 PM
16	PS1-A: Students are more able to conduct and analyze data instead of planning due to time constraints.	11/13/2015 1:54 PM
17	Students can conduct and analyze the data but they don't need to plan an investigation. PS1	11/13/2015 1:54 PM
18	Students can conduct and analyze data but can not really plan it, with time problems.	11/13/2015 1:54 PM
19	Students can conduct an investigation and analyze the data, however, I do not think they are ready to plan an investigation at the lower elementary level.	11/13/2015 1:54 PM
20	Many of the standards need to be understood at a basic level before a student can extrapolate a new idea.	11/13/2015 1:36 PM
21	PS1- A This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:36 PM
22	Standards are appropriate except for the measuring force in newtons.	11/13/2015 11:23 AM
23	PS2-B - students can not comprehend the planet's center. They don't know how to begin to support and argument about something they can't conceptualize. This also has no meaning to them whatsoever. The previous standard was much more real life.	11/13/2015 11:02 AM
24	Use the NGSS.	11/13/2015 10:56 AM
25	Sorting by physical properties is the only developmentally appropriate way for students to describe how to separate the components of a mixture/solution. Filtration, magnets, and screening are too advanced for the 4th grade level.	11/13/2015 10:24 AM

Q4 The standards in this strand follow a coherent path through and across all grade levels.

Answered: 71 Skipped: 189



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	50.70% 36	26.76% 19	5.63% 4	16.90% 12	71	1.89

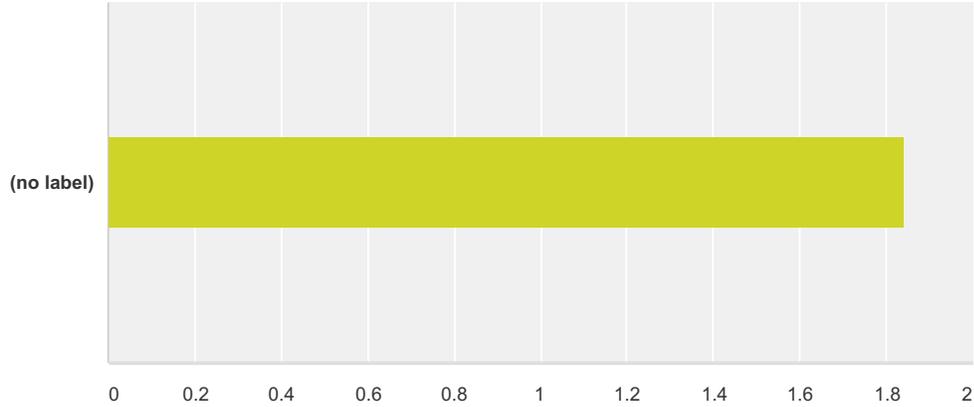
#	Suggested revisions for standards:	Date
1	The jump from PS1A in 3rd grade to what students are expected to do in 5th grade is not appropriate, especially since the standard is not addressed in 4th grade at all. Is there an example of a model that is considered acceptable for 5th grade. This is just one example of the gaps that lie within these standards.	12/2/2015 7:39 PM
2	I must say these standards are an improvement over what we have however, even though there are fewer standards per topic, they are very broad and would require an extreme number of learning targets to be taught before you would get to the actual requirement of the standard. Verbage such as: Plan and conduct a fair test, Plan and conduct an investigation, Use/ provide evidence to construct an explanation, Develop a model, Support an argument - take a lot of time to truly teach an encompassing unit to the depth our students need ... and can we truly say mastery learning is taking place if we do not give our students the TIME NEEDED to actually investigate and understand the concepts presented? These are welcome concepts - but it still seems like a lot of material to be covered in a year - to the depth we as educators would like it taught and to the depth that our students need and deserve.	12/2/2015 2:33 PM
3	Teachers will need PD in understanding how to read the NGSS vs. our current SC MLS.	12/1/2015 9:17 AM
4	Understanding matter is critical for preparing for Chemistry. Students who have a weak foundation in physical science do not pursue advanced coursed in secondary setting. Grade 2 should contain the bulk of physical property standards PS1.A Grade 5 should build on these and include chemical reactions PS1.B Buy bundling them in 2 grade bands, we ensure depth of understanding instead of giving each grade a piece and expecting them to hold onto that piece to add to the next year's piece.	12/1/2015 7:13 AM
5	Although it follows a logical sequence pushing the standards down a grade level is problematic because the students will not be able to internalize important concepts needed to understand 5th grade material	11/30/2015 3:12 PM
6	Not enough depth or substance	11/30/2015 3:08 PM
7	Missing chemical changes added to the standards.	11/30/2015 11:11 AM
8	PS1- A This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:36 PM
9	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:23 AM

HB1490 Work Group - Science K-5

10	Elementary students are not ready to think abstractly. Have you ever heard of Piaget? He explained that children are only capable of concrete thinking at the elementary age. There should be more concrete thinking and less abstract thinking until students reach middle school age.	11/13/2015 11:02 AM
11	Use the NGSS.	11/13/2015 10:56 AM
12	The changes do not make sense. Why are things so broken up? How are teachers supposed to continually teach 6 different subjects and be experts on topics taught to their students when things keep changing? Why are all of the standards being revised in a year????	11/12/2015 7:40 PM

Q5 The standards set a rigorous path of high expectations for students at each grade level.

Answered: 74 Skipped: 186



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	52.70% 39	25.68% 19	6.76% 5	14.86% 11	74	1.84

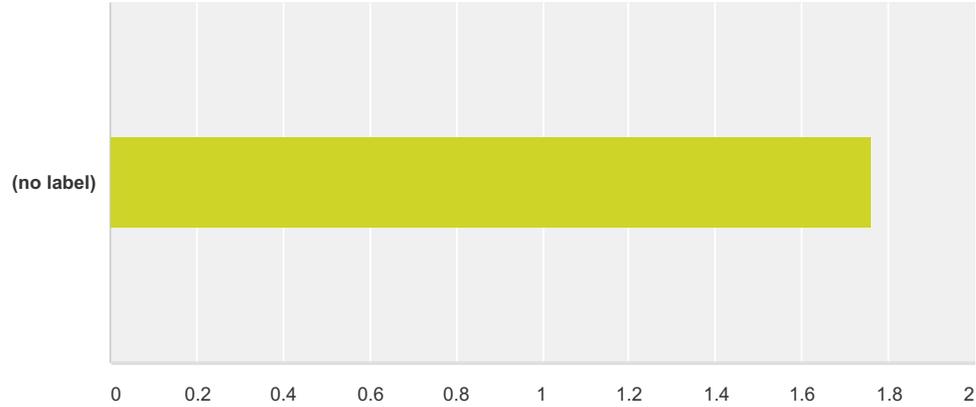
#	Suggested revisions for standards:	Date
1	For second grade, could there be a list of different kinds of materials that need to be covered? This is very open ended to teacher discretion in PS1 and PS1-A.	12/2/2015 10:35 PM
2	Rigor is not the major issue I'm concerned about ... will teachers have the time to be as rigorous as they'd like, or will they only have the time to skim the surface? Back to our standards being a mile wide and an inch deep. (Sigh!) I was hoping Missouri would address that more this round.	12/2/2015 2:33 PM
3	Teachers will need PD in understanding how to read the NGSS vs. our current SC MLS.	12/1/2015 9:17 AM
4	Understanding matter is critical for preparing for Chemistry. Students who have a weak foundation in physical science do not pursue advanced courses in secondary setting. Instructing students and establishing a broad understanding through 3 dimensional learning is critical. Grade 2 should contain the bulk of physical property standards PS1.A Rigor would increase by condensing the standards into groupings that allow in-depth study. Add: 2-PS1-3 Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object. We miss an opportunity to set the foundation that chemical compounds are made from smaller parts. This concrete representation allows young learners to scaffold understanding of chemical properties. Add to Grade 5: Make observations and measurements to identify materials based on their properties. 5-PS1.3. Pre chemistry skill is vital to classification of matter based on a broad range of properties. It is critical to go as deep as possible in grade 5 in matter. Some districts teach middle school science in bands and these students may not get physical science again until 8th grade. They need DEEP understanding. Grade 5 should build on these and include chemical reactions PS1.B Add:	12/1/2015 7:13 AM
5	Standards are too rigorous at this young of an age	11/30/2015 3:12 PM
6	Not enough depth or substance	11/30/2015 3:08 PM
7	PS1- A This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:36 PM
8	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:23 AM
9	They are very rigorous and unrealistic. Many adults won't be able to read and comprehend these standards much less 8-10 year old students.	11/13/2015 11:02 AM

HB1490 Work Group - Science K-5

10	Use the NGSS.	11/13/2015 10:56 AM
11	Less rigorous standards? Why?	11/12/2015 7:40 PM

Q6 The majority of the standards in this strand can be assessed in the classroom and/or on a state assessment.

Answered: 72 Skipped: 188

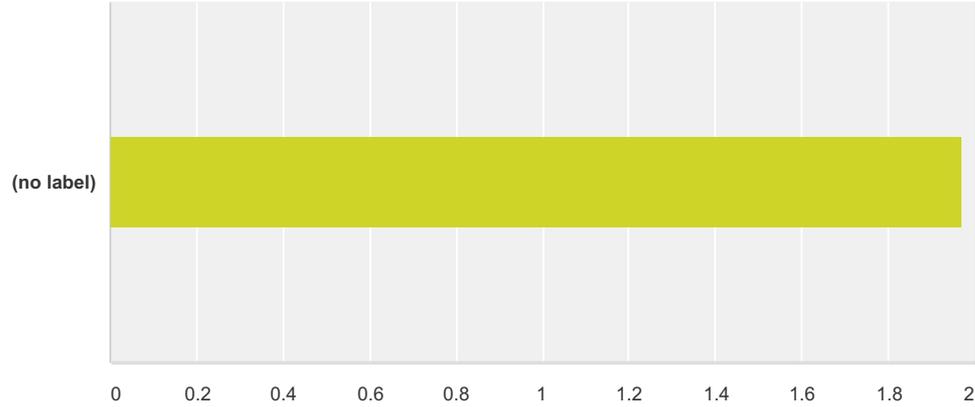


	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	55.56% 40	25.00% 18	6.94% 5	12.50% 9	72	1.76

#	Suggested revisions for standards:	Date
1	Some of these standards can only be assessed in the classroom, but not on an online state assessment since there are models to develop.	12/2/2015 7:39 PM
2	I would need to see a few sample state assessment questions before I comment.	12/2/2015 2:33 PM
3	In my opinion the standards are confusing and would be very difficult to assess in the classroom and on a state assessment.	12/1/2015 6:45 PM
4	Teachers will need PD in understanding how to read the NGSS vs. our current SC MLS.	12/1/2015 9:17 AM
5	The students could be assessed on the proposed standards in grade 5, but with the current arrangement of every grade gets a little piece, students will not perform well on this as their instruction will be superficial and piecemeal through elementary school. Matter and Its interactions are a comprehensive study of a group of expectations, not one piece at a time spread out over years, where there is little hope of a solid foundation being built.	12/1/2015 7:13 AM
6	These standards can be assessed but mastery is unattainable for this developmental age.	11/30/2015 3:12 PM
7	Not enough depth or substance	11/30/2015 3:08 PM
8	Please explain in detail how "develop a model..." will be assessed with online testing.	11/16/2015 2:33 PM
9	Developong a model may be difficult to assess.	11/16/2015 2:16 PM
10	PS1- A This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:36 PM
11	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:23 AM
12	Schools must be able to provide materials for teachers to use.	11/13/2015 11:02 AM
13	Use the NGSS.	11/13/2015 10:56 AM
14	Anything can be assessed it doesn't mean it's quality.	11/12/2015 7:40 PM

Q7 The standards in this strand are understandable to educators and explainable to parents and other stakeholders.

Answered: 70 Skipped: 190

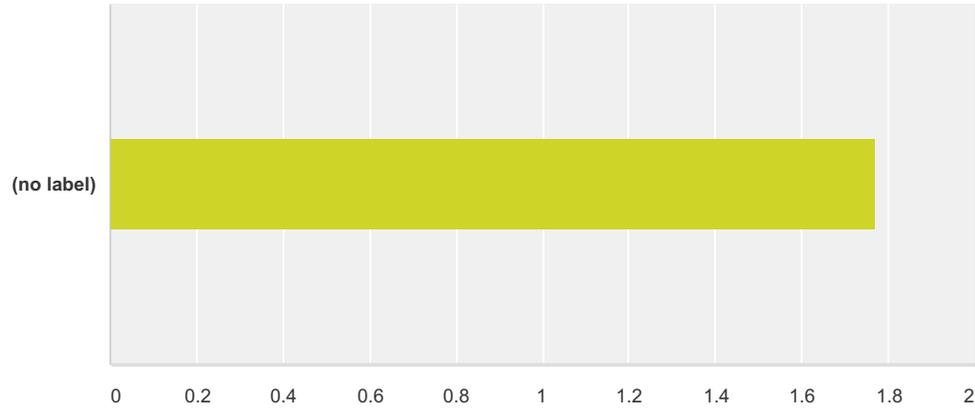


	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	42.86% 30	32.86% 23	8.57% 6	15.71% 11	70	1.97

#	Suggested revisions for standards:	Date
1	I think an average teacher would read a standard and not have a clue where to begin. The standards are v-e-r-y broad!	12/2/2015 2:33 PM
2	The layout of the document makes it very confusing to understand.	12/1/2015 11:21 PM
3	Teachers will need PD in understanding how to read the NGSS vs. our current SC MLS.	12/1/2015 9:17 AM
4	Yes, these are understandable, but what they won't understand is reading the one per grade level offering. The thought will be "is that all they have to do:" One standard to teach in a field of study may generate a "why bother" if that is all I have to teach. Grouping them together creates a unit of study. As presented, there is a weak foundation being built and with no true depth of study at any grade in physical science, we are not establishing a solid foundation to understand matter and its interactions.	12/1/2015 7:13 AM
5	This is a very general standard. Past standards were broken down and contained more specifics.	11/30/2015 3:31 PM
6	It is difficult to justify to parents and stakeholders why students will be asked to learn material that is developmentally inappropriate.	11/30/2015 3:12 PM
7	Not enough depth or substance	11/30/2015 3:08 PM
8	Very general, past standards were broken down, more specific	11/30/2015 3:03 PM
9	very general. past standards were broken down and contained more specifics	11/30/2015 2:15 PM
10	See above comment.	11/16/2015 2:33 PM
11	PS1- A This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:36 PM
12	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:23 AM
13	Some of the standards need to be simplified.	11/13/2015 11:02 AM
14	Use the NGSS.	11/13/2015 10:56 AM

Q8 The standards in this strand represent the necessary content for a student to reach college and/or career readiness upon graduation.

Answered: 73 Skipped: 187

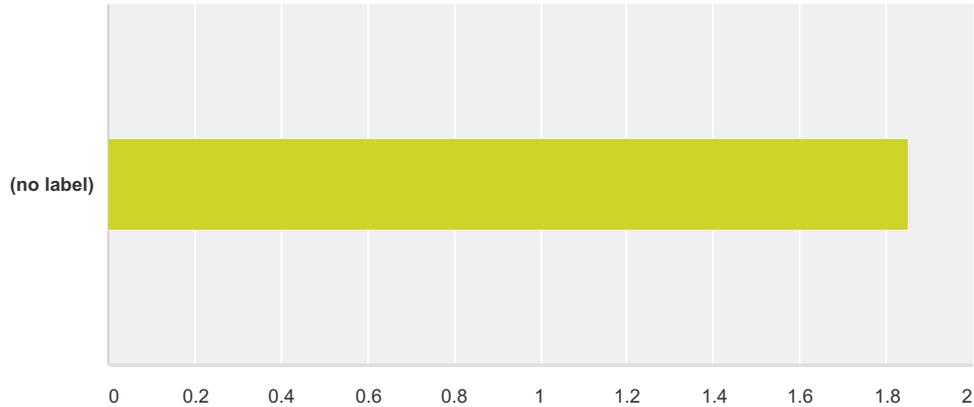


	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	56.16% 41	26.03% 19	2.74% 2	15.07% 11	73	1.77

#	Suggested revisions for standards:	Date
1	Teachers will need PD in understanding how to read the NGSS vs. our current SC MLS.	12/1/2015 9:17 AM
2	The way these are spread out in pieces, students will not develop a readiness for secondary school, let alone college and or career. This arrangement does not establish a strong foundation of chemistry. To expect our students to succeed in the future, they need a solid foundation. The other concern is that the K-5 and 6-12 standards proposed have little resemblance. The 6-12 standards have three dimensional learning considered. We need to prepare our students for secondary school expectations which will lead them to college and career readiness.	12/1/2015 7:13 AM
3	The content is necessary but more practical at a higher grade level.	11/30/2015 3:12 PM
4	Not enough depth or substance	11/30/2015 3:08 PM
5	Basis for foundation	11/30/2015 11:11 AM
6	PS1- A This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:36 PM
7	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:23 AM
8	Use the NGSS.	11/13/2015 10:56 AM
9	The standards are less rigorous how are they supposed to prepare our students to be college and career ready when we are changing the expectations?	11/12/2015 7:40 PM

Q9 The standards in this strand are accurate and encompass the breadth of the content.

Answered: 74 Skipped: 186



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	52.70% 39	25.68% 19	5.41% 4	16.22% 12	74	1.85

#	Suggested revisions for standards:	Date
1	Teachers will need PD in understanding how to read the NGSS vs. our current SC MLS.	12/1/2015 9:17 AM
2	PS1.A Structures and Properties of Matter The concept of studying properties of matter as proposed will create a dilution of content understanding. Grades K, 1, 2, 3 and 5 all will study properties of matter, but each grade covers just a small piece. Teachers will either teach beyond this little piece they are assigned to help provide depth of understanding of matter. OR they won't bother teaching this at all - why teach one piece? This will create a lot of review and repeated experiences that will not be unique or in depth to master an understanding of content. Matter should be introduced in Grade 2 and built on in grade 5 PS1.B Chemical Reactions This section of matter has standards assigned to grades 2, 3, 4 and 5 - Again, creating thin topics of study that have no depth. The assessments for these stand alone skills will not reveal any depth of knowledge. It is spread out among too many grades creating a hazard to cover and move on.	12/1/2015 7:13 AM
3	see above	11/30/2015 3:12 PM
4	Not enough depth or substance	11/30/2015 3:08 PM
5	The standards are too narrow	11/30/2015 2:55 PM
6	Missing- chemical changes compared to physical changes (5th Grade possibly)	11/30/2015 11:11 AM
7	Stay more concrete at lower levels in order to build a foundation that secondary teachers can build on.	11/18/2015 1:05 PM
8	PS1- A This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:36 PM
9	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:23 AM
10	Use the NGSS.	11/13/2015 10:56 AM
11	There is no depth, a mile wide, and an inch deep.	11/12/2015 7:40 PM

Matter and Its
Interactions (PS1)**Q10 Overall comments regarding the
proposed standards for Matter and Its
Interactions (PS1):**

Answered: 23 Skipped: 237

#	Responses	Date
1	Kindergarten - PS1A (Sort objects based on observable physical properties (e.g. size, material, color, shape, mass) and explain sorting criteria) * Glad to see this standard included. 3rd Grade - PS1A (Structures of Properties of Matter) * I like that they added Predict and Investigate on this standard.	12/2/2015 8:07 PM
2	Wording in the proposed standards are easier to understand for the most part.	12/2/2015 7:54 PM
3	It is too difficult to make a comment.	12/2/2015 4:29 PM
4	You have added 8 standards to the already large amount of standards that is expected to be learned. This is disappointing as an educator, and I find it hard to believe that several educators got together and drafted this document. The GLEs and Common Core Standards were already too numerous to tackle with any type of success for students and teachers that have perfect attendance each school year.	12/2/2015 4:20 PM
5	Overall comment on all strands - all the above. I do want to comment on the Story Lines for K-5 Science I feel they will be very beneficial in guiding teachers as they prepare their lesson plans in the future.	12/2/2015 2:33 PM
6	It would be helpful to have a more clear understanding of the standard, such as simpler verbiage as well as examples of how to assess them.	12/1/2015 6:45 PM
7	There is no mention of ENGINEERING in any of the grade levels K-12; if we are to prepare our students for STEM and being able to compete with other states/countries, it is vital that we embed engineering into our standards.	12/1/2015 9:17 AM
8	PS1.A Structures and Properties of Matter The concept of studying properties of matter as proposed will create a dilution of content understanding. Grades K, 1, 2, 3 and 5 all will study properties of matter, but each grade covers just a small piece. Teachers will teach beyond this little piece they are assigned to teach to provide depth of understanding of matter. This will create a lot of review and repeated experiences that will not be unique or in depth to master an understanding of content. Matter should be introduced in Grade 2 and go into more depth in grade 5 to prepare students for middle school. PS1.B Chemical Reactions This section of matter has standards assigned to grades 2, 3, 4 and 5 - Again, creating thin topics of study that have no depth. The assessments for these stand alone skills will not reveal any depth of knowledge. It is spread out among too many grades creating a hazard to cover and move on. These standards need a major realignment - In fact the entire Physical Science Strand is critically flawed. It should not be fractured so severely.	12/1/2015 7:13 AM
9	Proposed standards are very broad. Old standards were broken down to more specifics.	11/30/2015 3:31 PM
10	Given the time that we have in our schedules teaching this much information at this depth will pose problems. The students in younger grades are more focused on learning basic reading skills and they will not come to fifth grade prepared to learn this information.	11/30/2015 3:12 PM
11	Proposed standards are very broad. Old standards were broken down.	11/30/2015 3:03 PM
12	Proposed standards are very broad. old standards were broken down to more specifics.	11/30/2015 2:34 PM
13	Very broad. Old standards were more specific.	11/30/2015 2:15 PM
14	I know the workgroups came together to just work on their specific grade levels/subjects, but did ALL of the subjects come together for one grade level to see the load that was added to the school year? Did the workgroups take into consideration that the teachers have been writing curriculum to the current standards and they will VERY QUICKLY have to update/revise the curriculum to the new standards? Most schools just purchased new books/materials to match the current standards and that was thousands of dollars that they may not be able to use anymore. Missouri needs some consistency in education, and I think we are headed there - but in the meantime, there are frustrated teachers, administrators, and parents who are tired of going back and forth, changing, adding, updating... I appreciate the time each work group put into developing our new standards - I know it took a lot of your time and effort. I hope that you all read and evaluate every comment that is presented during this comment period to make our standards the best they can be.	11/30/2015 1:33 PM
15	Fine	11/30/2015 1:16 PM
16	An overall lack of rigor tells students that nothing is expected from them.	11/30/2015 12:37 PM

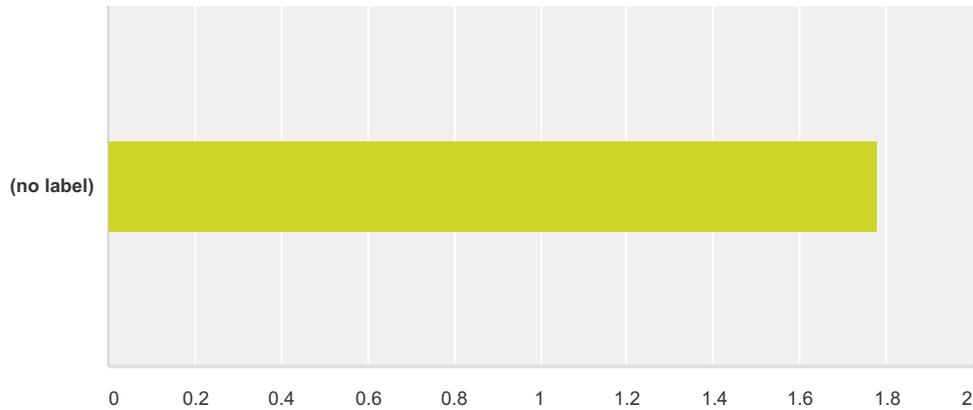
HB1490 Work Group - Science K-5

17	Fifth Grade - PS1-B is not complete - appears to be a unfinished sentence after the word new..???	11/30/2015 11:11 AM
18	Concepts and means of demonstration too advanced for grade level.	11/18/2015 1:05 PM
19	I have no issue with any of the science standards as long as the test is changed to not be a grade-span test. I am penalized as a teacher for what 3rd and 4th grade teachers have not taught their students and it causes great undue stress to my students.	11/16/2015 12:26 PM
20	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:23 AM
21	Think about your audience. Do you really believe your own children and grandchildren would be ready to learn these standards?	11/13/2015 11:02 AM
22	Let's use the Next Generation Science Standards. This is ridiculous that we spend so much time and money on trying to figure out what standards to teach our kids when the Next Generation Science Standards are already written and easy to follow. Quit trying to reinvent the wheel.	11/13/2015 10:56 AM
23	Do not continue down this path. There isn't alignment amongst the various subjects, has anyone thought to compare the ELA and SS standards to see if this makes sense?	11/12/2015 7:40 PM

Motion and Stability;
Forces and Interactions
(PS2)

Q12 The standards in this strand are developmentally appropriate.

Answered: 46 Skipped: 214



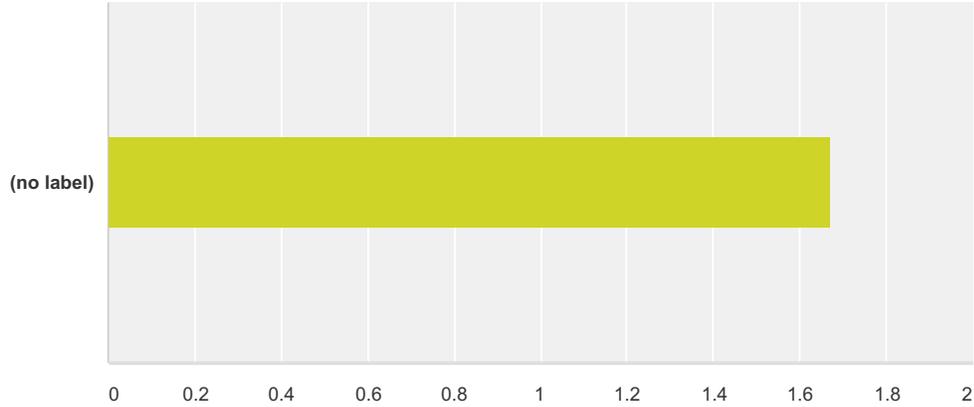
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	43.48% 20	41.30% 19	8.70% 4	6.52% 3	46	1.78

#	Suggested revisions for standards:	Date
1	In Kindergarten pushing and pulling has always been associated with magnets.	12/1/2015 12:05 PM
2	Teachers will need to have PD in the understanding of how to read the NGSS.	12/1/2015 9:19 AM
3	PS2.A Four different grades should not be responsible for teaching Force and Motion. PS2.B Three different grades are assigned types of interactions. PS2.C There are no expectations for students to learn about Stability and Instability in physical systems. Students can be introduced to Motion and Stability: Forces and Interactions in Kindergarten. Exploration with cause and effect of physical systems is developmentally appropriate. Going in depth with additional standards in grade 3 will allow for deep understanding of these concepts. 3-PS2-3 Predict the effects of an electrostatic force (static electricity) on the motion of objects (attract or repel). This is too abstract of a concept for 8 year olds. Students in grade 3 can't understand what is going on other than noting natural phenomena exists. They can't explain it. Too difficult - they do not understand the concept of electron movement.	12/1/2015 8:19 AM
4	Not enough depth or substance	11/30/2015 3:10 PM
5	Introduce balanced / unbalanced forces in third grade Continue with force and motion of objects in third grade / relate these forces to attract and repel forces of magnets Add simple machines because this provides an avenue to investigate forces and motion As a third grade teacher for fifteen years, I do not feel that the Motion & Stability; Forces & Interactions should be adopted. Force and Motion is basically forgotten in third grade.	11/30/2015 1:35 PM
6	Standards are vague and split across too many grades.	11/30/2015 1:25 PM
7	Clarify how to support an argument.....	11/16/2015 2:18 PM
8	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:25 AM
9	Use the NGSS.	11/13/2015 10:57 AM
10	All of the standards within PS2 are much too advanced for the 4th grade level. These are more like middle school skills.	11/13/2015 10:27 AM
11	These new science standards are meant to raise the bar for students and I think they are doing this. However, for these standards to succeed, more time needs to be devoted to the teaching of science and integrated into other STEM fields.	11/6/2015 1:17 PM

Motion and Stability; Forces and Interactions (PS2)

Q13 The standards in this strand follow a coherent path through and across all grade levels.

Answered: 45 Skipped: 215



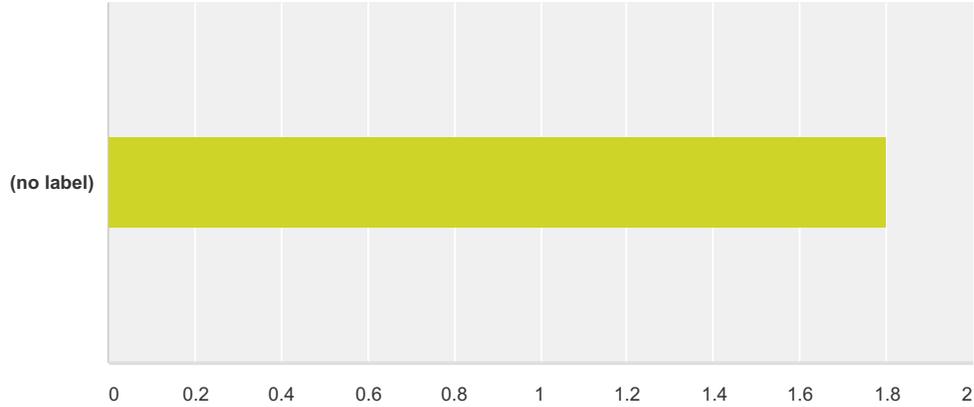
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	53.33% 24	33.33% 15	6.67% 3	6.67% 3	45	1.67

#	Suggested revisions for standards:	Date
1	I must say these standards are an improvement over what we have. However, even though there are fewer standards per topic, they are very broad and would require an extreme number of learning targets to be taught before you would get to the actual requirement of the standard. Verbage such as: Plan and conduct a fair test, Plan and conduct an investigation, Use/ provide evidence to construct an explanation, Develop a model, Support an argument - take a lot of time to truly teach an encompassing unit to the depth our students need ... and can we truly say mastery learning is taking place if we do not give our students the TIME NEEDED to actually investigate and understand the concepts presented? These are welcome concepts - but it still seems like a lot of material to be covered in a year - to the depth we as educators would like it taught, and to the depth that our students need and deserve.	12/2/2015 2:36 PM
2	Teachers will need to have PD in the understanding of how to read the NGSS.	12/1/2015 9:19 AM
3	Inch deep and a mile wide is happening with these physical science standards for Motion and Stability. It is fractured strangely. Why would Grades K-2 just focus on Forces and Motion Then in grades 3 and 4 students can explore Types of interactions separately from Force and Motion. These are not separate and isolated skills, they work together to build the foundation of physics. To develop a unit of study, Force and Motion should be taught in concert with Types of Interactions to develop an understanding of Motion and stability of objects in our physical world.	12/1/2015 8:19 AM
4	Not enough depth or substance	11/30/2015 3:10 PM
5	There are gaps and a disconnect among the grades. Grade - level standards should build on each other, on a solid foundation. However, when the foundation isn't introduced until the upper grades, students cannot fully understand the concept or topic.	11/30/2015 1:35 PM
6	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:25 AM
7	Use the NGSS.	11/13/2015 10:57 AM

Motion and Stability;
Forces and Interactions
(PS2)

Q14 The standards set a rigorous path of high expectations for students at each grade level.

Answered: 46 Skipped: 214



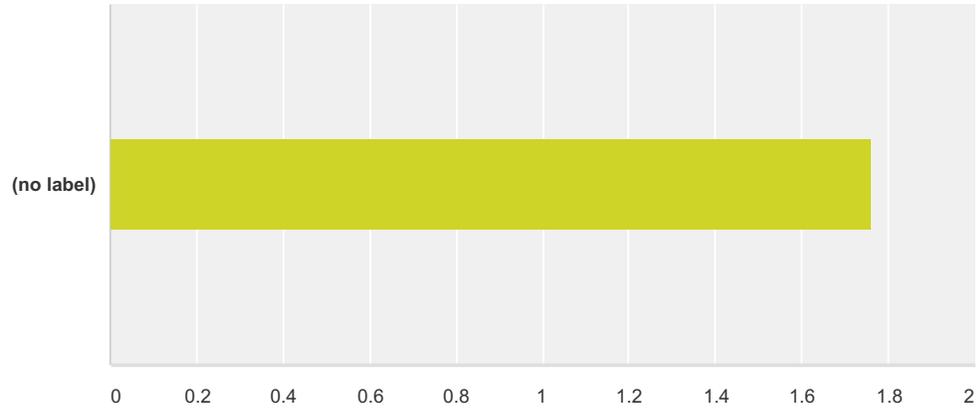
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	45.65% 21	34.78% 16	13.04% 6	6.52% 3	46	1.80

#	Suggested revisions for standards:	Date
1	I must say these standards are an improvement over what we have. However, even though there are fewer standards per topic, they are very broad and would require an extreme number of learning targets to be taught before you would get to the actual requirement of the standard. Verbage such as: Plan and conduct a fair test, Plan and conduct an investigation, Use/ provide evidence to construct an explanation, Develop a model, Support an argument - take a lot of time to truly teach an encompassing unit to the depth our students need ... and can we truly say mastery learning is taking place if we do not give our students the TIME NEEDED to actually investigate and understand the concepts presented? These are welcome concepts - but it still seems like a lot of material to be covered in a year - to the depth we as educators would like it taught, and to the depth that our students need and deserve.	12/2/2015 2:36 PM
2	Teachers will need to have PD in the understanding of how to read the NGSS.	12/1/2015 9:19 AM
3	These need better science and engineering verbs. When the majority of the terms used can occur with the teacher doing a demonstration (describe, predict, make observations), Then the students are not doing science. Also, the fact that an entire sub component: PS2.C Stability and Instability in Physical Systems is left off is concerning - This is where the rigor comes to play. How do we keep systems in balance? PS2.A Plan and conduct: (K, Describe (1st Predict and Demonstrate 2nd Make observations and or measurements (4 Plan and Conduct an Investigation (4 PS2.B Predict and Describe (3 Predict the effects (3 Plan and conduct a fair test (4 Predict (4 Support an Argument (5	12/1/2015 8:19 AM
4	Not enough depth or substance	11/30/2015 3:10 PM
5	NO, it is much too easy for third graders.	11/30/2015 1:35 PM
6	The standards are very vague....they are not written with specific ideas and the standards don't go deep enough.	11/30/2015 1:24 PM
7	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:25 AM
8	Use the NGSS.	11/13/2015 10:57 AM
9	The absence of any engineering principles is disappointing. With a greater emphasis on STEM and the Engineering Design Process, it is disappointing to see engineering and design not to be a big part of the curriculum. We need to not be fearful of making a curriculum shift because others might be uncomfortable with that change.	11/6/2015 1:17 PM

Motion and Stability;
Forces and
Interactions (PS2)

Q15 The majority of the standards in this strand can be assessed in the classroom and/or on a state assessment.

Answered: 45 Skipped: 215

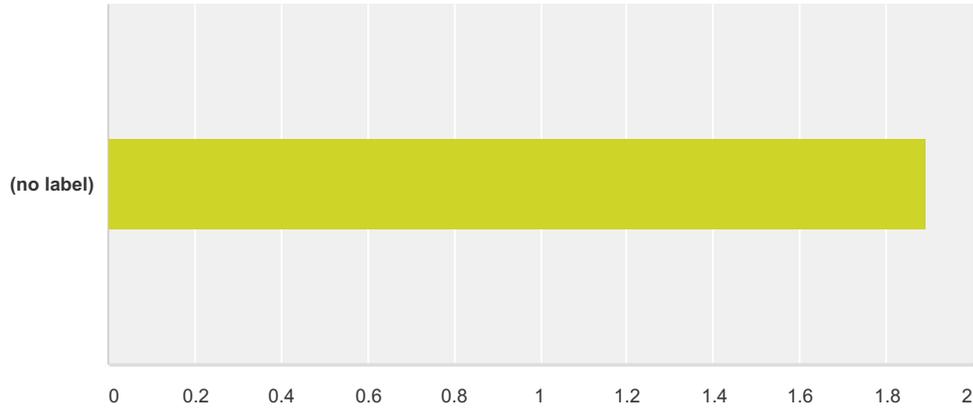


	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	44.44% 20	40.00% 18	11.11% 5	4.44% 2	45	1.76

#	Suggested revisions for standards:	Date
1	I would need to see a few sample state assessment questions before I comment.	12/2/2015 2:36 PM
2	Teachers will need to have PD in the understanding of how to read the NGSS.	12/1/2015 9:19 AM
3	When standards are taught in isolation as most of these are, then the assessment will be more factual in nature. How can students answer performance based assessments, when they do not get to experience all of the elements of a conceptual idea to reach deeper meaning and understanding of how the world works?	12/1/2015 8:19 AM
4	Not enough depth or substance	11/30/2015 3:10 PM
5	I do believe that students should be tested on the science standards.	11/30/2015 1:35 PM
6	Standards are way too broad.	11/16/2015 2:46 PM
7	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:25 AM
8	Use the NGSS.	11/13/2015 10:57 AM

Q16 The standards in this strand are understandable to educators and explainable to parents and other stakeholders.

Answered: 46 Skipped: 214



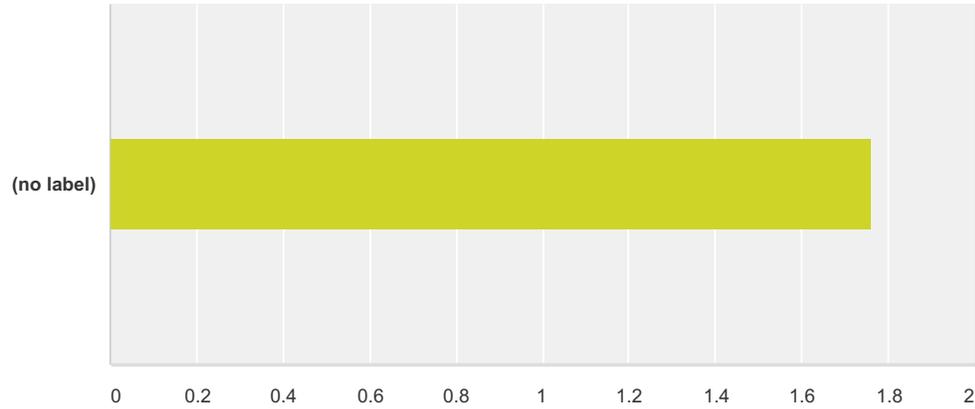
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	39.13% 18	39.13% 18	15.22% 7	6.52% 3	46	1.89

#	Suggested revisions for standards:	Date
1	I think an average teacher would read a standard and not have a clue where to begin. The standards are v-e-r-y broad!	12/2/2015 2:36 PM
2	They are confusing! Change the layout.	12/1/2015 11:23 PM
3	Teachers will need to have PD in the understanding of how to read the NGSS.	12/1/2015 9:19 AM
4	These are understandable as single standards, what is hard to understand is the story line for each - What does the unit look like? How are they building understanding of Motion and Stability: Forces and Interactions when they only get to study pieces here and there and have limited, narrow experiences at each grade. This propagates the inch deep, mile wide. Students do not make in depth connections which will continue to foster underachievement in science.	12/1/2015 8:19 AM
5	Not enough depth or substance	11/30/2015 3:10 PM
6	The standards do not go into enough depth and appear disconnected the different grade-levels.	11/30/2015 1:35 PM
7	Some of the wording is vague unless parents have some understanding of the physical science terms.	11/30/2015 1:03 PM
8	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:25 AM
9	Use the NGSS.	11/13/2015 10:57 AM
10	Many of the standards are written on a high reading level and with expectation of substantial content knowledge. Both teachers and parents may not have that knowledge base due to the overemphasis on reading and math over the years. These new standards will need to be accompanied by teacher development to build content knowledge at a level that is acceptable to teach these standards.	11/6/2015 1:17 PM
11	I do not understand PS2B--how does one describe the electric interactions between two objects not in contact with each other?	11/2/2015 5:41 PM

Motion and Stability;
Forces and
Interactions (PS2)

Q17 The standards in this strand represent the necessary content for a student to reach college and/or career readiness upon graduation.

Answered: 45 Skipped: 215

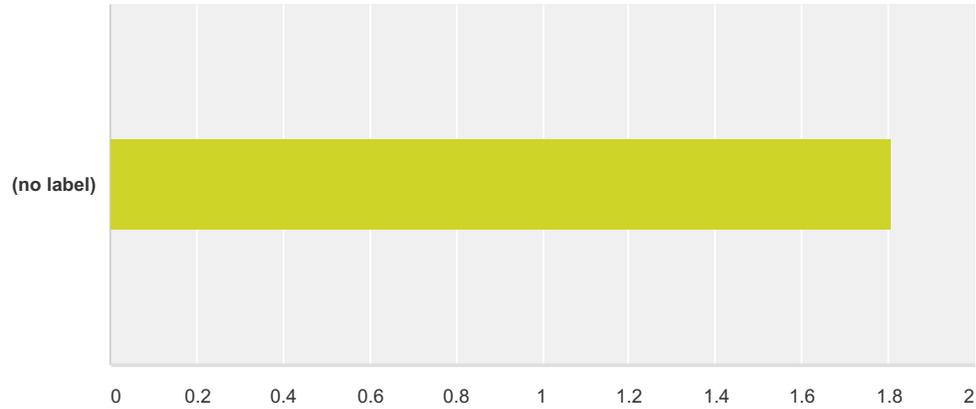


	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	46.67% 21	37.78% 17	8.89% 4	6.67% 3	45	1.76

#	Suggested revisions for standards:	Date
1	Teachers will need to have PD in the understanding of how to read the NGSS. Need to add engineering standards.	12/1/2015 9:19 AM
2	Physical Science Foundations are important and build the foundation for understanding physics. We have too few students taking HS physics, and we need to build capacity with our younger learners by creating in depth UNITS of study.	12/1/2015 8:19 AM
3	Not enough depth or substance	11/30/2015 3:10 PM
4	The standards do not go into enough depth and appear disconnected among the different grade-levels.	11/30/2015 1:35 PM
5	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:25 AM
6	Use the NGSS.	11/13/2015 10:57 AM
7	College and career ready standards should contain design skills, creativity, and high level thinking skills beyond comparison. Design and computational thinking concepts with correlations to math standards should be emphasized to make this document take on more of a STEM focus instead of an isolated science only focus.	11/6/2015 1:17 PM

Q18 The standards in this strand are accurate and encompass the breadth of the content.

Answered: 47 Skipped: 213



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	44.68% 21	38.30% 18	8.51% 4	8.51% 4	47	1.81

#	Suggested revisions for standards:	Date
1	Teachers will need to have PD in the understanding of how to read the NGSS.	12/1/2015 9:19 AM
2	Kindergarten should have the first exposure to standards on Force and Motion Third grade should have the rest - build a UNIT of study. Grade 5 keeps the standard on gravity, it fits with their space and earth systems unit. Add: K-PS2-2 Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull. Add: K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. Add: 3-PS2-1 Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. Replace: Predict and describe (magnets) with the following: Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. 3-PS2-3. Add: Define a simple design problem that can be solved by applying scientific ideas about magnets. 3-PS2-4	12/1/2015 8:19 AM
3	Not enough depth or substance	11/30/2015 3:10 PM
4	The standards are too narrow	11/30/2015 2:56 PM
5	The standards do not build upon each other throughout the grade - level continuum.	11/30/2015 1:35 PM
6	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:25 AM
7	Use the NGSS.	11/13/2015 10:57 AM

Motion and
Stability; Forces and
Interactions (PS2)

**Q19 Overall comments regarding the
proposed standards for Motion and
Stability; Forces and Interactions (PS2):**

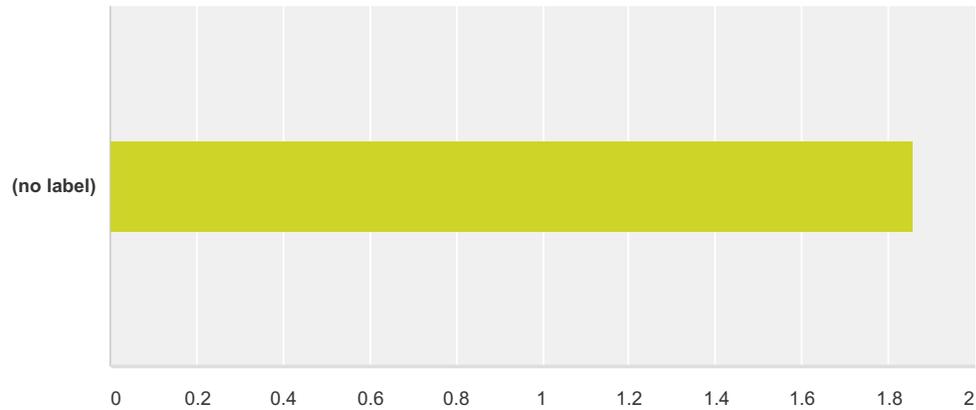
Answered: 20 Skipped: 240

#	Responses	Date
1	Kindergarten - PS2A (Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.) (This would need to be a "with guidance" standard.	12/2/2015 8:03 PM
2	It seems that there should be a larger focus on force and motion in these standards.	12/2/2015 7:44 PM
3	I do want to comment on the Story Lines for K-5 Science ... I feel they will be very beneficial in guiding teachers as they prepare their lesson plans in the future.	12/2/2015 2:36 PM
4	Magnets should be included in Kindergarten standards	12/1/2015 12:05 PM
5	There is no mention of ENGINEERING in any of the grade levels K-12; if we are to prepare our students for STEM and being able to compete with other states/countries, it is vital that we embed engineering into our standards.	12/1/2015 9:19 AM
6	PS2.A Forces and Motion - should not be in all of these grades. K, 1, 2, 3, 4 PS2.B Types of Interactions should not be taught separate from PS2.A 3, 4, 5 PS2.C Stability and Instability in Physical Systems No Grades assigned Standards	12/1/2015 8:19 AM
7	This topic (magnetism) is new for 3rd grade. Will require that materials to support instruction be purchased and /or moved from other grades.	12/1/2015 8:16 AM
8	This topic (magnetism) is new for 3rd grade. Will require that materials to support instruction be purchased and/or moved from other grade levels.	11/30/2015 2:17 PM
9	I am disappointed in the science standards. As a teacher in a STEAM elementary school, I do not believe that they are rigorous, contain academic gaps, and fall short of the Next Generation Standards.	11/30/2015 1:35 PM
10	We feel that this is a little vague, and we are worried about the students losing prior knowledge.	11/30/2015 1:25 PM
11	I want more specific wording for the science standards....	11/30/2015 1:24 PM
12	The standards are vague and worry about prior knowledge.	11/30/2015 1:24 PM
13	I believe the terms pull, push, force, and work should be included in the standard.	11/30/2015 9:33 AM
14	I believe the terms pull, push, force, and work should be included in the standard.	11/30/2015 9:33 AM
15	I believe the terms pull, push, force, and work should be included in the standard.	11/30/2015 9:33 AM
16	Overall, the science standards have been extremely pushed down. Many standards have been added to each grade level, but nothing has been taken off. We need to prioritize the standards and give teachers an amount of standards that they can teach well with the time they are given. The science standard are very wordy and technically written. Writing them in student-friendly language would help curriculum writers, teachers and students alike.	11/24/2015 12:41 PM
17	Standards are appropriate except for the measuring force in newtons	11/13/2015 11:25 AM
18	Let's use the Next Generation Science Standards. This is ridiculous that we spend so much time and money on trying to figure out what standards to teach our kids when the Next Generation Science Standards are already written and easy to follow. Quit trying to reinvent the wheel.	11/13/2015 10:57 AM
19	With so much emphasis being placed on STEM, to see so little STEM integration is disappointing. Engineering concepts can be integrated in at early ages to help students start to develop a passion for STEM.	11/6/2015 1:17 PM
20	The standards regarding magnets and electricity will require additional supplies to provide students with these investigations.	11/2/2015 5:41 PM

Energy (PS3)

Q21 The standards in this strand are developmentally appropriate.

Answered: 28 Skipped: 232

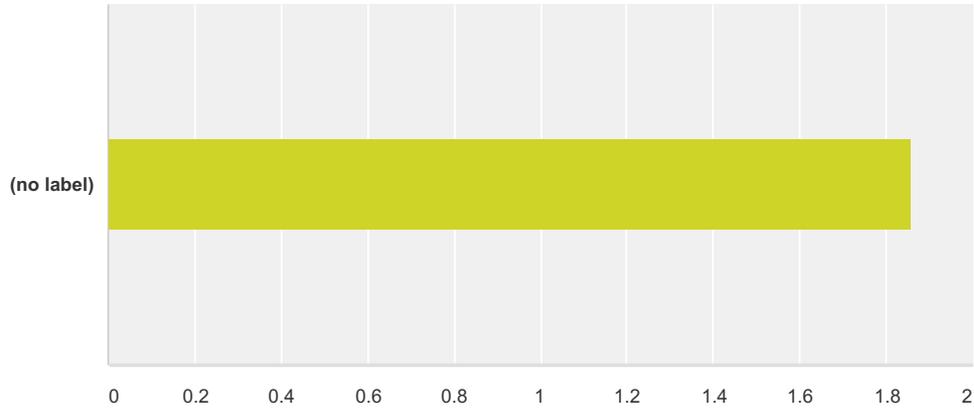


	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	39.29% 11	46.43% 13	3.57% 1	10.71% 3	28	1.86

#	Suggested revisions for standards:	Date
1	Teachers will need PD in the understanding of how to read the NGSS. We need to add engineering standards.	12/1/2015 9:21 AM
2	Not enough depth or substance	11/30/2015 3:09 PM
3	PS3B-Conservation of Energy and Energy Transfer To high of a skill for 5th grade, needs to be a 6th grade level	11/13/2015 1:55 PM
4	Many of the standards need to be understood at a basic level before a student can extrapolate a new idea.	11/13/2015 1:35 PM
5	Use the NGSS.	11/13/2015 10:58 AM

Q22 The standards in this strand follow a coherent path through and across all grade levels.

Answered: 28 Skipped: 232



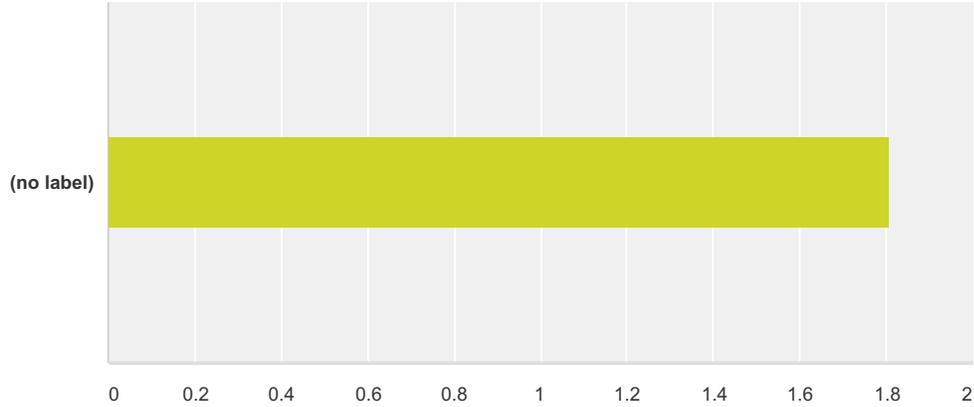
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	42.86% 12	39.29% 11	7.14% 2	10.71% 3	28	1.86

#	Suggested revisions for standards:	Date
1	I must say these standards are an improvement over what we have. However, even though there are fewer standards per topic, they are very broad and would require an extreme number of learning targets to be taught before you would get to the actual requirement of the standard. Verbage such as: Plan and conduct a fair test, Plan and conduct an investigation, Use/ provide evidence to construct an explanation, Develop a model, Support an argument - take a lot of time to truly teach an encompassing unit to the depth our students need ... and can we truly say mastery learning is taking place if we do not give our students the TIME NEEDED to actually investigate and understand the concepts presented? These are welcome concepts - but it still seems like a lot of material to be covered in a year - to the depth we as educators would like it taught, and to the depth that our students need and deserve.	12/2/2015 2:38 PM
2	Teachers will need PD in the understanding of how to read the NGSS. We need to add engineering standards.	12/1/2015 9:21 AM
3	PS3.A coherent in Grad 4 PS3.B to support weather and climate in Kindergarten: Add - Make observations to determine the effect of sunlight on Earth's surface. K-PS3-1 Also add: Use tools and materials provided to design and build a structure that will reduce the warming effect of sunlight on an area. K-PS3-2. Add: Ask questions and predict outcomes about the changes in energy that occur when objects collide. 4-PS3-3 Grade 5 study is not coherent: One standard on gravity, another on light reflection, another on simple machines and the last on energy we use comes from the sun. = This is so fractured, How can a UNIT of understanding be developed from 4 discrepant phenomena.	12/1/2015 9:06 AM
4	Not enough depth or substance	11/30/2015 3:09 PM
5	Use the NGSS.	11/13/2015 10:58 AM

Energy (PS3)

Q23 The standards set a rigorous path of high expectations for students at each grade level.

Answered: 27 Skipped: 233



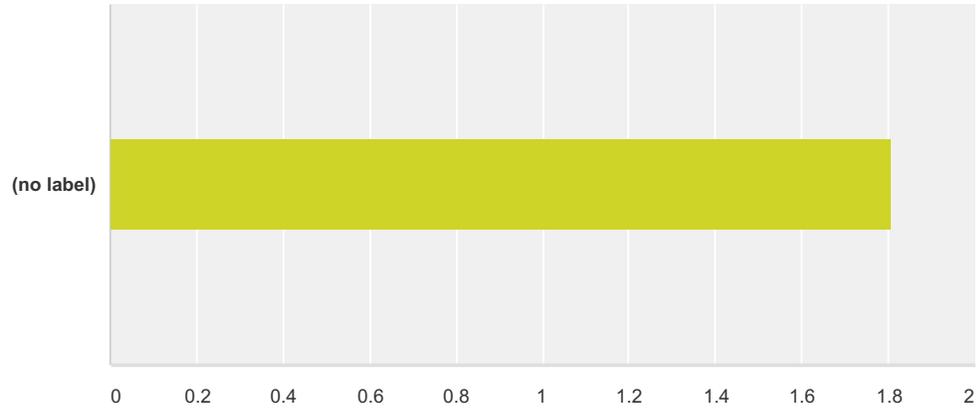
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	44.44% 12	40.74% 11	3.70% 1	11.11% 3	27	1.81

#	Suggested revisions for standards:	Date
1	Rigor is not the major issue I'm concerned about ... will teachers have the time to be as rigorous as they'd like, or will they only have the time to skim the surface? Back to our standards being a mile wide and an inch deep. (Sigh!) I was hoping Missouri would address that more this round.	12/2/2015 2:38 PM
2	Teachers will need PD in the understanding of how to read the NGSS. We need to add engineering standards.	12/1/2015 9:21 AM
3	By adding the PS3.B to Kindergarten the rigor of the unit of study will increase. Make observations to determine the effect of sunlight on Earth's surface. K-PS3-1 Also add: Use tools and materials provided to design and build a structure that will reduce the warming effect of sunlight on an area. K-PS3-2. Add: Ask questions and predict outcomes about the changes in energy that occur when objects collide 4-PS3-3 PS3.C There was one standard listed for grade 5. However, to increase rigor in concepts of energy, it will be important to identify relationships between concepts. Grade 5 study is not coherent: One standard on gravity, another on light reflection, another on simple machines and the last on energy we use comes from the sun. = This is so fractured, How can a rigorous UNIT of understanding be developed from 4 discrepant phenomena.	12/1/2015 9:06 AM
4	Not enough depth or substance	11/30/2015 3:09 PM
5	Use the NGSS.	11/13/2015 10:58 AM

Energy (PS3)

Q24 The majority of the standards in this strand can be assessed in the classroom and/or on a state assessment.

Answered: 27 Skipped: 233



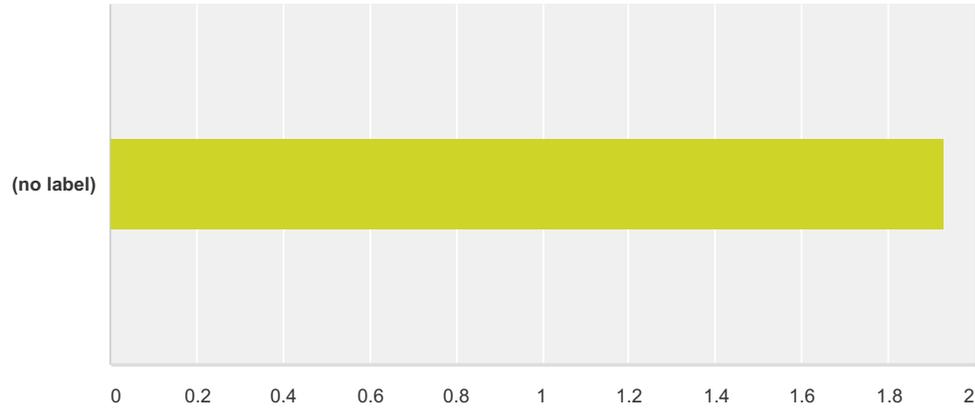
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	44.44% 12	40.74% 11	3.70% 1	11.11% 3	27	1.81

#	Suggested revisions for standards:	Date
1	I would need to see a few sample state assessment questions before I comment.	12/2/2015 2:38 PM
2	Teachers will need PD in the understanding of how to read the NGSS. We need to add engineering standards.	12/1/2015 9:21 AM
3	Grade 4 study of energy is related around energy transfer - it is fairly solid in presentation. Grade 5 study is not coherent: One standard on gravity, another on light reflection, another on simple machines and the last on energy we use comes from the sun. = This is so fractured, How can a UNIT of understanding be developed from 4 discrepant phenomena and conversely, how does one develop an assessment to evaluate this when they are so loosely arranged.	12/1/2015 9:06 AM
4	Not enough depth or substance	11/30/2015 3:09 PM
5	Some wording is vague.....hard to assess.	11/16/2015 2:28 PM
6	Use the NGSS.	11/13/2015 10:58 AM

Energy (PS3)

Q25 The standards in this strand are understandable to educators and explainable to parents and other stakeholders.

Answered: 27 Skipped: 233



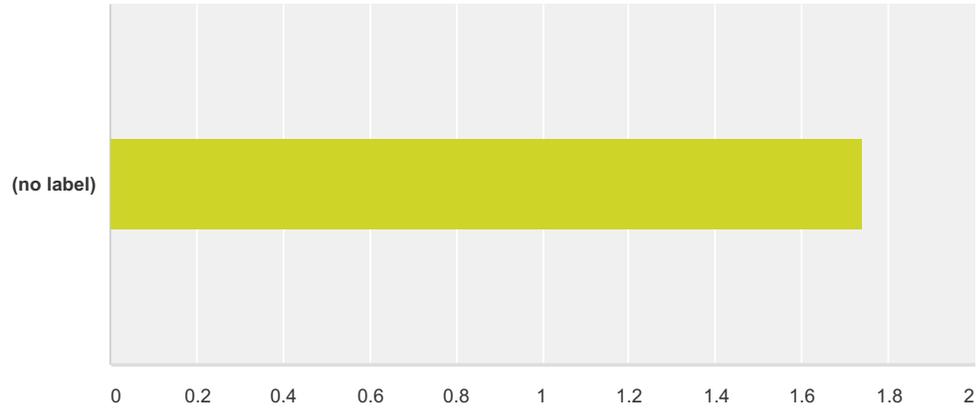
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	37.04% 10	44.44% 12	7.41% 2	11.11% 3	27	1.93

#	Suggested revisions for standards:	Date
1	I think an average teacher would read a standard and not have a clue where to begin. The standards are v-e-r-y broad!	12/2/2015 2:38 PM
2	They are confusing! Change the layout. The storylines definitely help!	12/1/2015 11:24 PM
3	Teachers will need PD in the understanding of how to read the NGSS. We need to add engineering standards.	12/1/2015 9:21 AM
4	Not enough depth or substance	11/30/2015 3:09 PM
5	A vocabulary list would be nice!	11/16/2015 2:28 PM
6	Use the NGSS.	11/13/2015 10:58 AM

Energy (PS3)

Q26 The standards in this strand represent the necessary content for a student to reach college and/or career readiness upon graduation.

Answered: 27 Skipped: 233



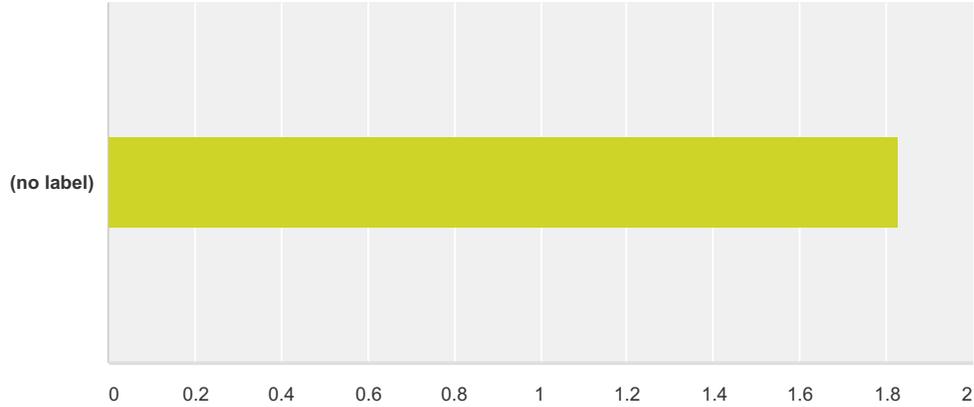
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	48.15% 13	40.74% 11	0.00% 0	11.11% 3	27	1.74

#	Suggested revisions for standards:	Date
1	Teachers will need PD in the understanding of how to read the NGSS. We need to add engineering standards.	12/1/2015 9:21 AM
2	Not enough depth or substance	11/30/2015 3:09 PM
3	Use the NGSS.	11/13/2015 10:58 AM

Energy (PS3)

Q27 The standards in this strand are accurate and encompass the breadth of the content.

Answered: 29 Skipped: 231



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	44.83% 13	37.93% 11	6.90% 2	10.34% 3	29	1.83

#	Suggested revisions for standards:	Date
1	Teachers will need PD in the understanding of how to read the NGSS. We need to add engineering standards.	12/1/2015 9:21 AM
2	PS3.B It is redundant to include "Provide evidence to construct an explanation of an energy TRANSFORMATION...." when there are 2 other standards that would encompass this. Eliminating energy standards from force and motion it related to Kindergarten diminished understanding of concepts.	12/1/2015 9:06 AM
3	Not enough depth or substance	11/30/2015 3:09 PM
4	The standards are too narrow	11/30/2015 2:56 PM
5	Use the NGSS.	11/13/2015 10:58 AM

Energy (PS3)

Q28 Overall comments regarding the proposed standards for Energy (PS3):

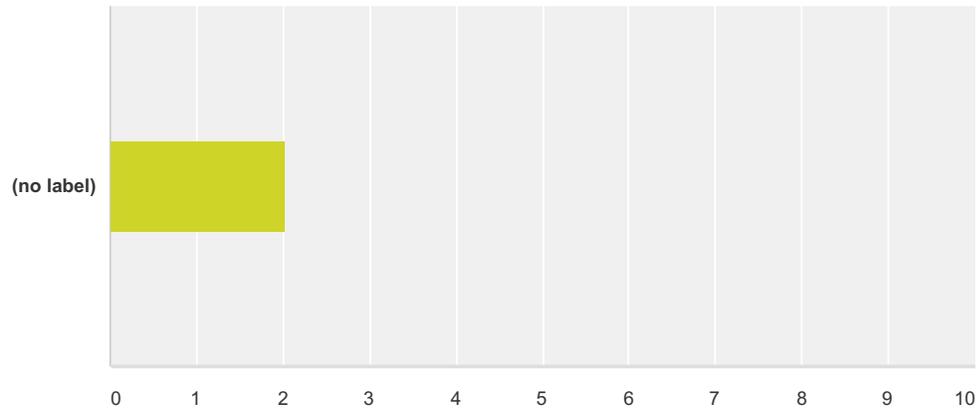
Answered: 7 Skipped: 253

#	Responses	Date
1	I do want to comment on the Story Lines for K-5 Science ... I feel they will be very beneficial in guiding teachers as they prepare their lesson plans in the future.	12/2/2015 2:38 PM
2	There is no mention of ENGINEERING in any of the grade levels K-12; if we are to prepare our students for STEM and being able to compete with other states/countries, it is vital that we embed engineering into our standards.	12/1/2015 9:21 AM
3	PS3.A Definitions of Energy (4th, PS3.B Conservation of Energy and Energy Transfer (4th, 5th PS3.C Relationship between Energy and Forces (5th PS3.D Energy in Chemical Processes and Everyday Life (5th Realignment is necessary K, and grade 4 are the key areas where energy should be studied. In grade K with Force and Motion and in Grade 4 with Wave studies. Grade 5 standards should be considered where they would support other strands of study. Like gravity for example, would fit in the space and earth systems study.	12/1/2015 9:06 AM
4	We are concerned about the lack of prior knowledge students will have in this area.	11/30/2015 1:27 PM
5	Kids are going to need prior knowledge!	11/30/2015 1:27 PM
6	Overall, the science standards have been extremely pushed down. Many standards have been added to each grade level, but nothing has been taken off. We need to prioritize the standards and give teachers an amount of standards that they can teach well with the time they are given. The science standard are very wordy and technically written. Writing them in student-friendly language would help curriculum writers, teachers and students alike.	11/24/2015 12:41 PM
7	Let's use the Next Generation Science Standards. This is ridiculous that we spend so much time and money on trying to figure out what standards to teach our kids when the Next Generation Science Standards are already written and easy to follow. Quit trying to reinvent the wheel.	11/13/2015 10:58 AM

Waves and Applications in
Technology for Information
Transfers (PS4)

**Q30 The standards in this strand are
developmentally appropriate.**

Answered: 36 Skipped: 224



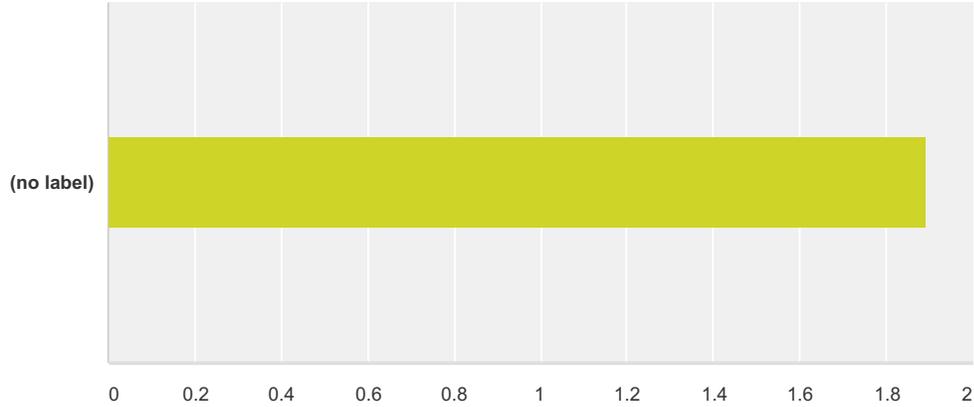
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	36.11% 13	33.33% 12	22.22% 8	8.33% 3	36	2.03

#	Suggested revisions for standards:	Date
1	More about the sense of hearing.	12/1/2015 12:08 PM
2	Where current standards are placed, they are developmentally appropriate, the issue is that there are too few and they are very weak. K, 1 and 2 do not all need to teach sound. Sound and Light can be taught to grade 1 as a solid Unit.	12/1/2015 9:30 AM
3	Teachers will need to have PD in understanding how to read the NGSS; engineering standards need to be added.	12/1/2015 9:23 AM
4	Not enough depth or substance	11/30/2015 3:10 PM
5	PS4A is currently a second grade standard, but is placed in first grade in the proposed standards. This needs to remain in second grade.	11/24/2015 12:40 PM
6	Curious if the repeating of standards in K and grade 1 is because the writers think students do not attend K?	11/20/2015 2:02 PM
7	Planning an investigation at the lower elementary developmentally appropriate.	11/13/2015 2:01 PM
8	PS4-A: Planning the investigation is not developmentally appropriate at a lower elementary level.	11/13/2015 2:00 PM
9	Students will be able to conduct an investigation and identify the mediums that sound travels through. However, they don't need to be planning.	11/13/2015 2:00 PM
10	The planning part will be difficult for the students.	11/13/2015 1:59 PM
11	PS4C-Information Technologies and Instrumentation We think this is too high of a skill for 5th grade to develop a model of waves	11/13/2015 1:53 PM
12	Use the NGSS.	11/13/2015 11:00 AM
13	This standard is much to advanced for the 4th grade level.	11/13/2015 10:31 AM

Waves and Applications
in Technology for
Information Transfers
(PS4)

Q31 The standards in this strand follow a coherent path through and across all grade levels.

Answered: 35 Skipped: 225

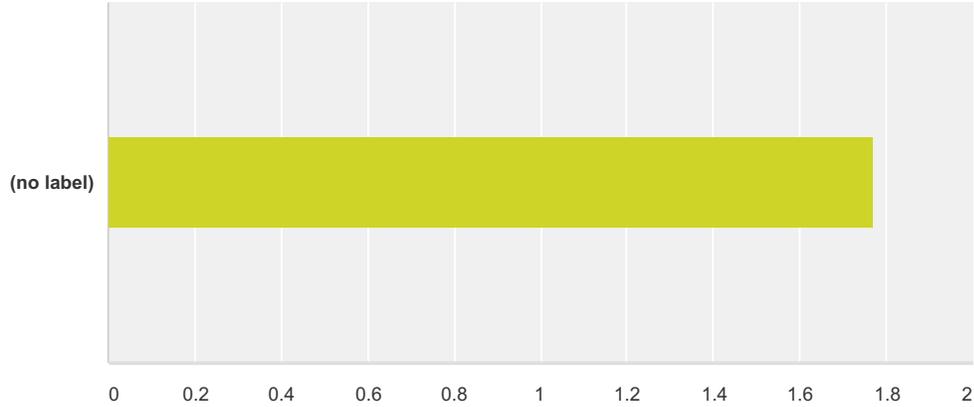


	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	45.71% 16	31.43% 11	11.43% 4	11.43% 4	35	1.89

#	Suggested revisions for standards:	Date
1	I must say these standards are an improvement over what we have. However, even though there are fewer standards per topic, they are very broad and would require an extreme number of learning targets to be taught before you would get to the actual requirement of the standard. Verbage such as: Plan and conduct a fair test, Plan and conduct an investigation, Use/ provide evidence to construct an explanation, Develop a model, Support an argument - take a lot of time to truly teach an encompassing unit to the depth our students need ... and can we truly say mastery learning is taking place if we do not give our students the TIME NEEDED to actually investigate and understand the concepts presented? These are welcome concepts - but it still seems like a lot of material to be covered in a year - to the depth we as educators would like it taught, and to the depth that our students need and deserve.	12/2/2015 2:40 PM
2	PS4.A Wave properties. Sound is repeated in grades K, 1 and 2 and there is no depth to the standards. Wave properties include light and there is no study of light AT ALL, until a reflection only is covered in grade 5. Add: First Grade - 1-PS4-2 Make observations to construct an evidence based account that objects in darkness can be seen only when illuminated. Add: First Grade - 1-PS4-3 Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light. Add: Fourth Grade: Generate and compare multiple solutions that use patterns to transfer information. 4-PS4-3.	12/1/2015 9:30 AM
3	Teachers will need to have PD in understanding how to read the NGSS; engineering standards need to be added.	12/1/2015 9:23 AM
4	Not enough depth or substance	11/30/2015 3:10 PM
5	Sound waves are very difficult for young children to understand. The standards in grades K, 1, and 2 need to be merged into the same grade level for a unit on sound. We don't have the materials to teach this in three grade levels.	11/20/2015 2:02 PM
6	The way the standard is currently written is more specific.	11/13/2015 2:01 PM
7	Use the NGSS.	11/13/2015 11:00 AM
8	The kindergarten and first grade standards are exactly the same. Either remove PS4-A from kindergarten or rewrite the first grade standard to a higher level.	11/2/2015 5:40 PM

Q32 The standards set a rigorous path of high expectations for students at each grade level.

Answered: 35 Skipped: 225



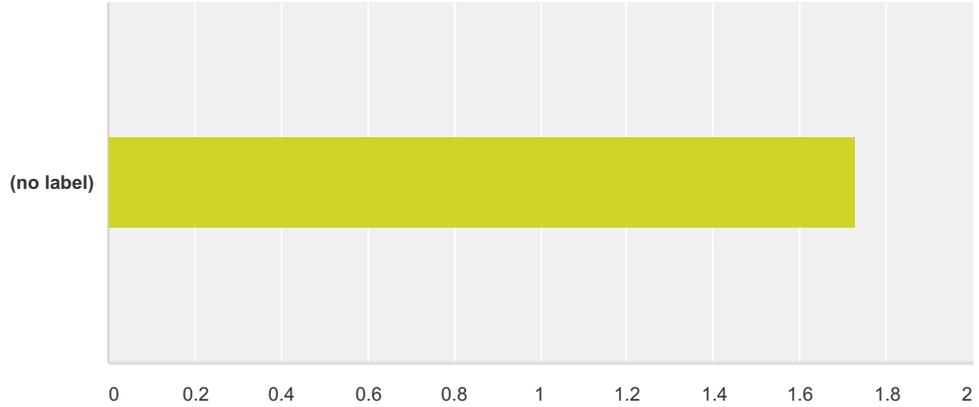
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	45.71% 16	40.00% 14	5.71% 2	8.57% 3	35	1.77

#	Suggested revisions for standards:	Date
1	Rigor is not the major issue I'm concerned about ... will teachers have the time to be as rigorous as they'd like, or will they only have the time to skim the surface? Back to our standards being a mile wide and an inch deep. (Sigh!) I was hoping Missouri would address that more this round.	12/2/2015 2:40 PM
2	There is an opportunity to scaffold and support learning in many ways. Sound being taught in 3 consecutive grades does not reflect rigor. Eliminating light studies, lessens rigor as students can't compare two different wave systems	12/1/2015 9:30 AM
3	Teachers will need to have PD in understanding how to read the NGSS; engineering standards need to be added.	12/1/2015 9:23 AM
4	Not enough depth or substance	11/30/2015 3:10 PM
5	By putting one standard in each grade level, the rigor is not there. With so many different topics included in each grade level the rigor is lost.	11/20/2015 2:02 PM
6	Use the NGSS.	11/13/2015 11:00 AM

Waves and Applications in Technology for Information Transfers (PS4)

Q33 The majority of the standards in this strand can be assessed in the classroom and/or on a state assessment.

Answered: 33 Skipped: 227



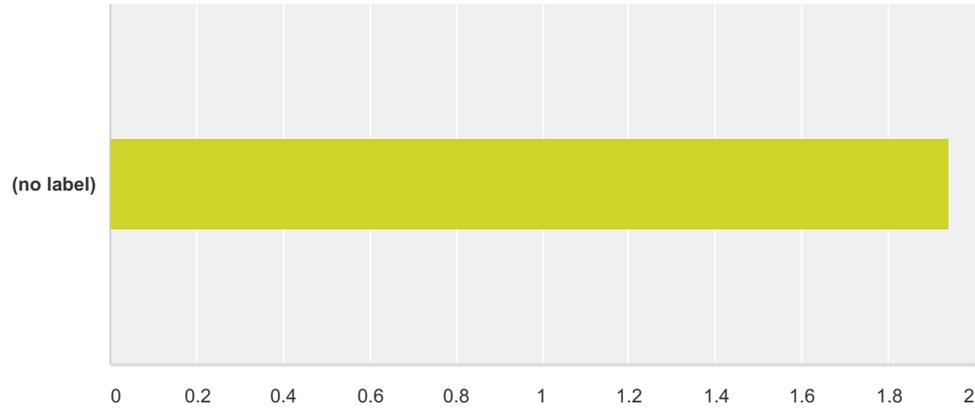
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	45.45% 15	42.42% 14	6.06% 2	6.06% 2	33	1.73

#	Suggested revisions for standards:	Date
1	I would need to see a few sample state assessment questions before I comment.	12/2/2015 2:40 PM
2	The standards need more depth to evaluate a concept such as waves. If we just study sound, we are not supporting students in their understanding of physics and how cell towers work how all of our gadgets work through wave systems of sound and light.	12/1/2015 9:30 AM
3	Teachers will need to have PD in understanding how to read the NGSS; engineering standards need to be added.	12/1/2015 9:23 AM
4	Not enough depth or substance	11/30/2015 3:10 PM
5	They can be assessed, but assessing in grade k,1, 2, 4, 5 is not necessary.	11/20/2015 2:02 PM
6	Use the NGSS.	11/13/2015 11:00 AM

Waves and Applications in
Technology for
Information Transfers
(PS4)

Q34 The standards in this strand are understandable to educators and explainable to parents and other stakeholders.

Answered: 36 Skipped: 224



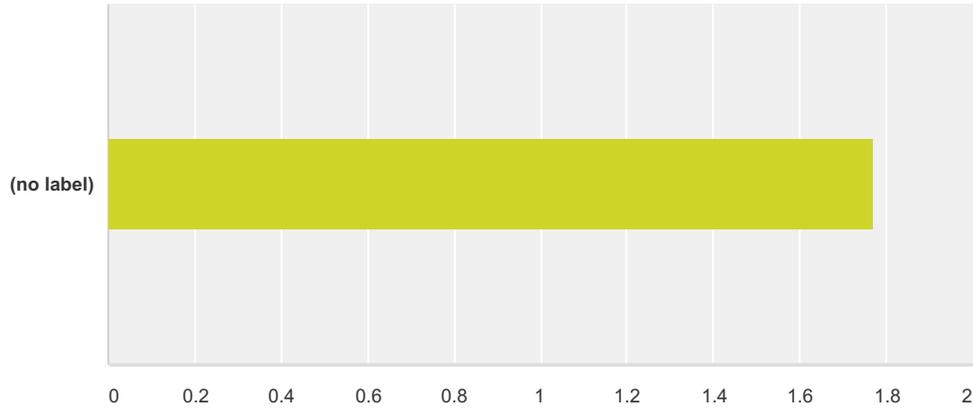
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	41.67% 15	33.33% 12	13.89% 5	11.11% 4	36	1.94

#	Suggested revisions for standards:	Date
1	I think an average teacher would read a standard and not have a clue where to begin. The standards are v-e-r-y broad!	12/2/2015 2:40 PM
2	Teachers will need to have PD in understanding how to read the NGSS; engineering standards need to be added.	12/1/2015 9:23 AM
3	Not enough depth or substance	11/30/2015 3:10 PM
4	The way the standard is currently written is more specific and understandable.	11/13/2015 2:01 PM
5	Current standard for PS4-A is written in a way better understood than the proposed standard.	11/13/2015 2:00 PM
6	We liked the way the current standards are written.	11/13/2015 2:00 PM
7	Use the NGSS.	11/13/2015 11:00 AM

Waves and Applications in Technology for Information Transfers (PS4)

Q35 The standards in this strand represent the necessary content for a student to reach college and/or career readiness upon graduation.

Answered: 35 Skipped: 225



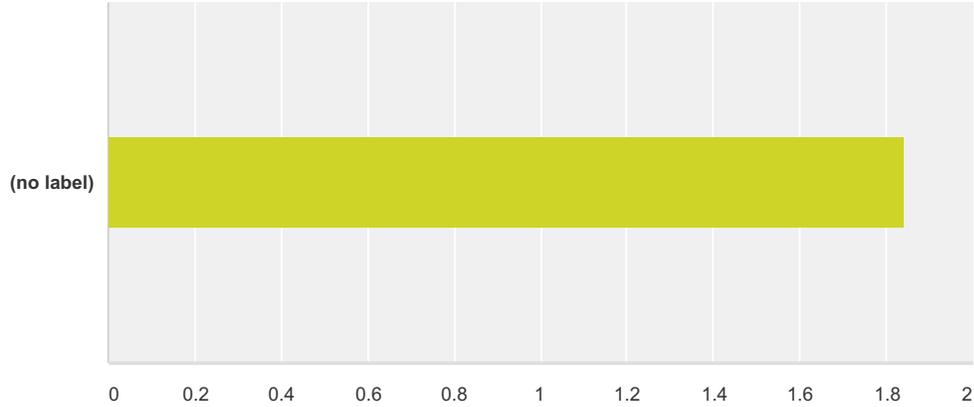
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	48.57% 17	34.29% 12	8.57% 3	8.57% 3	35	1.77

#	Suggested revisions for standards:	Date
1	Increase the study of light to create a balance of light and sound as energy we use to transmit information. The skills as presented would not support the expectations at middle school or HS let alone help students prepare for college and career.	12/1/2015 9:30 AM
2	Teachers will need to have PD in understanding how to read the NGSS; engineering standards need to be added.	12/1/2015 9:23 AM
3	Not enough depth or substance	11/30/2015 3:10 PM
4	Use the NGSS.	11/13/2015 11:00 AM

Waves and Applications in Technology for Information Transfers (PS4)

Q36 The standards in this strand are accurate and encompass the breadth of the content.

Answered: 37 Skipped: 223



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	43.24% 16	40.54% 15	5.41% 2	10.81% 4	37	1.84

#	Suggested revisions for standards:	Date
1	PS4.A Wave properties. Sound is repeated in grades K, 1 and 2 and there is no depth to the standards. Wave properties include light and there is no study of light AT ALL, until a reflection only is covered in grade 5. Add: First Grade - 1-PS4-2 Make observations to construct an evidence based account that objects in darkness can be seen only when illuminated. Add: First Grade - 1-PS4-3 Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light. Add: Fourth Grade: Generate and compare multiple solutions that use patterns to transfer information. 4-PS4-3.	12/1/2015 9:30 AM
2	Teachers will need to have PD in understanding how to read the NGSS; engineering standards need to be added.	12/1/2015 9:23 AM
3	Not enough depth or substance	11/30/2015 3:10 PM
4	Use the NGSS.	11/13/2015 11:00 AM

Waves and Applications in Technology for Information Transfers (PS4)

Q37 Overall comments regarding the proposed standards for Waves and Applications in Technology for Information Transfers (PS4):

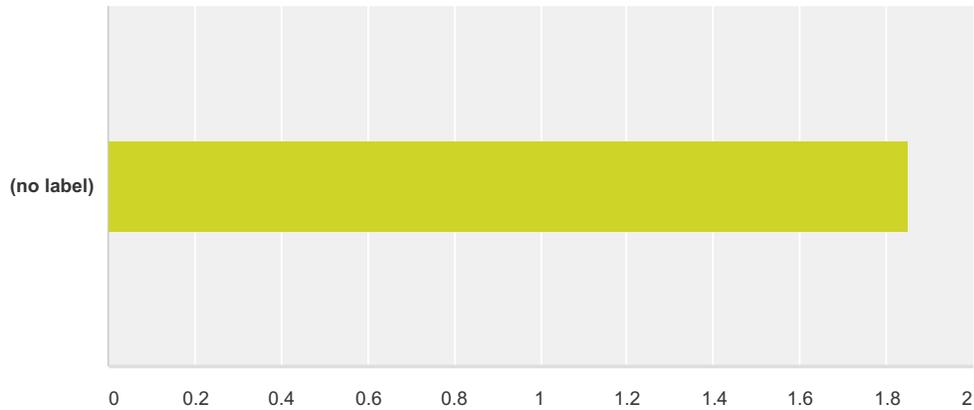
Answered: 12 Skipped: 248

#	Responses	Date
1	Kindergarten - PS4-A (Compare and contrast different sounds (loudness, pitch, duration)) * This would need to be a "with guidance" standard.	12/2/2015 8:04 PM
2	I do want to comment on the Story Lines for K-5 Science ... I feel they will be very beneficial in guiding teachers as they prepare their lesson plans in the future.	12/2/2015 2:40 PM
3	These proposed standards are too broad for upper elementary. It will be very difficult to get through all of these standards in an appropriate amount of time. Limit the units to no more than 5.	12/1/2015 7:44 PM
4	PS4.A Wave properties. Sound is repeated in grades K, 1 and 2 and there is no depth to the standards. Wave properties include light and there is no study of light AT ALL, until a reflection only is covered in grade 5. Add: First Grade - 1-PS4-2 Make observations to construct an evidence based account that objects in darkness can be seen only when illuminated. Add: First Grade - 1-PS4-3 Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light. Add: Fourth Grade: Generate and compare multiple solutions that use patterns to transfer information. 4-PS4-3. Increase the study of light to create a balance of light and sound as energy we use to transmit information. The skills as presented would not support the expectations at middle school or HS let alone help students prepare for college and career. The standards need more depth to evaluate a concept such as waves. If we just study sound, we are not supporting students in their understanding of physics and how cell towers work how all of our gadgets work through wave systems of sound and light.	12/1/2015 9:30 AM
5	There is no mention of ENGINEERING in any of the grade levels K-12; if we are to prepare our students for STEM and being able to compete with other states/countries, it is vital that we embed engineering into our standards.	12/1/2015 9:23 AM
6	I believe the term "contrast" should be omitted from the standard. I believe the wording using the "ear as a receiver" should be added to the end of the standard. Under 1-PS4C, I question why the word light is being used if not included under proposed standards.	11/30/2015 9:38 AM
7	I believe the word "contrast" should be omitted from the standard. I believe the wording "using the ear as the receiver" should be added to the end of the standard. Under PS4C I question why the word "light" is being used if not included in other standards.	11/30/2015 9:38 AM
8	I believe the term contrast should be omitted from the standard. I believe the wording 'using the ear as the receiver' should be added to the end of the standard. Under 1-PS4C I question why the word 'light' is being used if not included in other standards.	11/30/2015 9:38 AM
9	Overall, the science standards have been extremely pushed down. Many standards have been added to each grade level, but nothing has been taken off. We need to prioritize the standards and give teachers an amount of standards that they can teach well with the time they are given. The science standard are very wordy and technically written. Writing them in student-friendly language would help curriculum writers, teachers and students alike.	11/24/2015 12:40 PM
10	These standards do not include the Science and Engineering Practices and the Cross Cutting Concepts. Poor progression and spiraling as spread across k-5.	11/20/2015 2:02 PM
11	Let's use the Next Generation Science Standards. This is ridiculous that we spend so much time and money on trying to figure out what standards to teach our kids when the Next Generation Science Standards are already written and easy to follow. Quit trying to reinvent the wheel.	11/13/2015 11:00 AM
12	I agree with the inclusion of waves in the Missouri learning standards. A basic understanding of how sound and light travels is important for students.	11/5/2015 12:28 PM

From Molecules to Organisms: Structures and Process (LS1)

Q39 The standards in this strand are developmentally appropriate.

Answered: 54 Skipped: 206



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	53.70% 29	20.37% 11	12.96% 7	12.96% 7	54	1.85

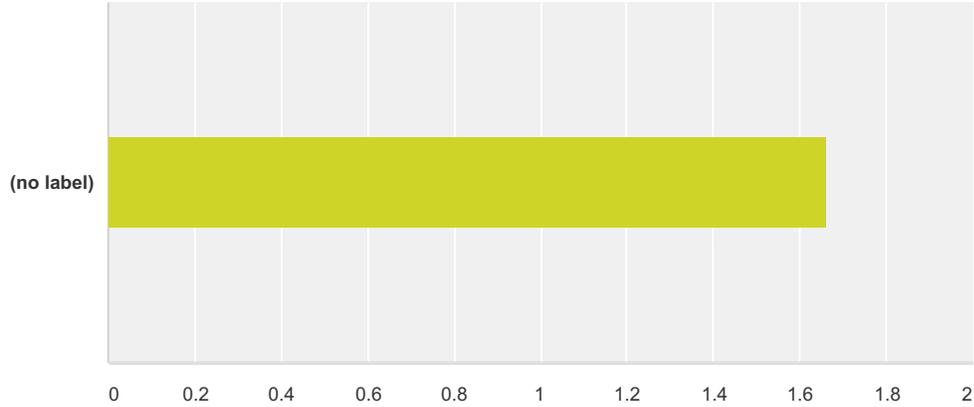
#	Suggested revisions for standards:	Date
1	I must say these standards are an improvement over what we have. However, even though there are fewer standards per topic, they are very broad and would require an extreme number of learning targets to be taught before you would get to the actual requirement of the standard. Verbage such as: Plan and conduct a fair test, Plan and conduct an investigation, Use/ provide evidence to construct an explanation, Develop a model, Support an argument - take a lot of time to truly teach an encompassing unit to the depth our students need ... and can we truly say mastery learning is taking place if we do not give our students the TIME NEEDED to actually investigate and understand the concepts presented? These are welcome concepts - but it still seems like a lot of material to be covered in a year - to the depth we as educators would like it taught, and to the depth that our students need and deserve.	12/2/2015 2:43 PM
2	Teachers will need to have PD in understanding how to read the NGSS. Engineering standards need to be added.	12/1/2015 9:26 AM
3	Fifth grade students do not need to compare and contrast different organ systems. It is a standard that involves a lot of memorizing and not looking at how systems work together. This standard does not ask the students to do any science to understand how these systems support life.	11/30/2015 10:01 PM
4	More specific about lifecycles- basic plant life cycle should be included	11/30/2015 2:00 PM
5	Reproduction in 4th grade is not developmentally appropriate	11/30/2015 1:28 PM
6	Kindergarten and First Grade have two identical standards- LS1-A and LS3-A - Change the depth of knowledge in 1st grade or the standard expectation.	11/30/2015 11:22 AM
7	Performance expectation LS1A for 1st grade confusing should be rewritten to more clearly reflect the concept of structures helping plants and animals to get what they need to survive.	11/23/2015 1:49 PM
8		11/20/2015 2:54 PM
9	Standards look acceptable, but on the linked document some of the sentences have been cut off and you cannot read the entire sentence.	11/18/2015 12:55 PM
10	The first grade standards in this strand leave a lot to be assumed by the classroom teacher. There needs to be more direction if it is intended to include needs of plants and animals as well as plant parts and how they function. I am not a new teacher, but if I were, I would be very confused. It also does not feel as if it is written as a clear objective, more as a suggestion on how to make the former standards more hands-on.	11/16/2015 2:27 PM

HB1490 Work Group - Science K-5

11	The first grade standard needs to be specific. (ie: parts of a plant and how they function, animal coverings). It also needs to be rewritten as an objective.	11/16/2015 2:22 PM
12	Use the NGSS.	11/13/2015 11:00 AM
13	Please give an example on LS1A Structure and Function What types of materials? Is this a physical model or drawing? Need more here because at this point, I'm not sure what you are asking and it seems like it may be too difficult for a first grader.	11/11/2015 2:15 PM
14	Need more specifics as to what is meant by using materials to design a solution at a 5 year old level.	11/9/2015 3:19 PM
15	LS4B regarding the selection of mates is inappropriate for 3rd graders. There is no reason at all for children at this age to be presented with information that might cause them to ask questions that teachers and parents are not prepared to answer. Move this to 5th grade at the very youngest.	11/2/2015 5:25 PM
16	The third grade strand talks only of the life cycle of a plants, but needs to encompass that of a plant as well. There are no previous strands that give the life cycle of a plant.	11/2/2015 5:16 PM

Q40 The standards in this strand follow a coherent path through and across all grade levels.

Answered: 50 Skipped: 210



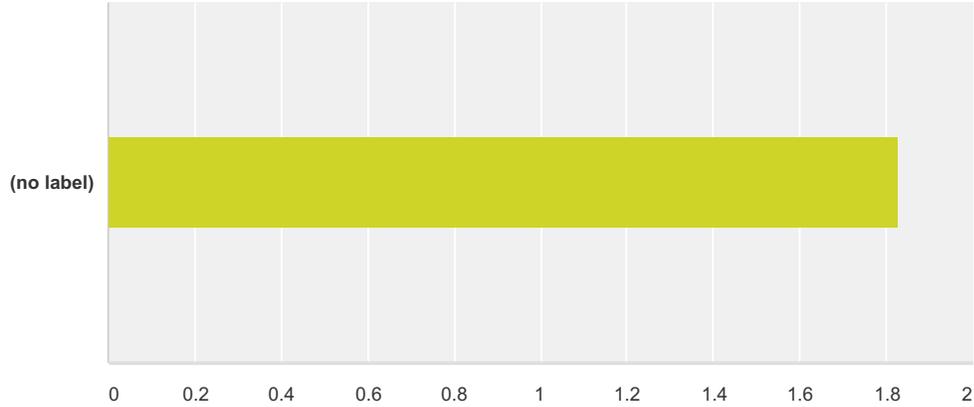
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	62.00% 31	20.00% 10	8.00% 4	10.00% 5	50	1.66

#	Suggested revisions for standards:	Date
1	Teachers will need to have PD in understanding how to read the NGSS. Engineering standards need to be added.	12/1/2015 9:26 AM
2	Kindergarten: There is only ONE Life Science Standard The goal of a balanced 3 dimensional instruction in science is to provide a balance of content with science and engineering practices as well as big idea concepts. Asking Kindergartners to only observe is not acceptable. First Grade: Needs more dimension Second Grade: all over the place with expectations: Structure and function of animals, growth and development of plants, Depth of understanding is compromised with this all over approach. We are an inch deep and a mile wide here. Third Grade: Primary focus in this strand is ONLY on life cycles of animals. Fourth Grade: coherent Fifth Grade: Classification Standards expecting them to only compare and contrast is not coherent.	11/30/2015 10:01 PM
3	Kindergarten and 1st Grade - same standard	11/30/2015 11:22 AM
4	"LS1" on page 35 should read LS4C	11/23/2015 1:49 PM
5	Every grade has components of the standard. It is difficult to understand the progression that led to these placements.	11/20/2015 2:54 PM
6	Use the NGSS.	11/13/2015 11:00 AM
7	Jumps ahead without first teaching the core concepts to be able to design a solution.	11/9/2015 3:19 PM
8	What grade is responsible for covering the plant life cycle?	11/2/2015 5:22 PM
9	Third grade needs to have background knowledge in the life cycle of a plant before 3rd grade.	11/2/2015 5:16 PM

From Molecules to Organisms: Structures and Process (LS1)

Q41 The standards set a rigorous path of high expectations for students at each grade level.

Answered: 53 Skipped: 207



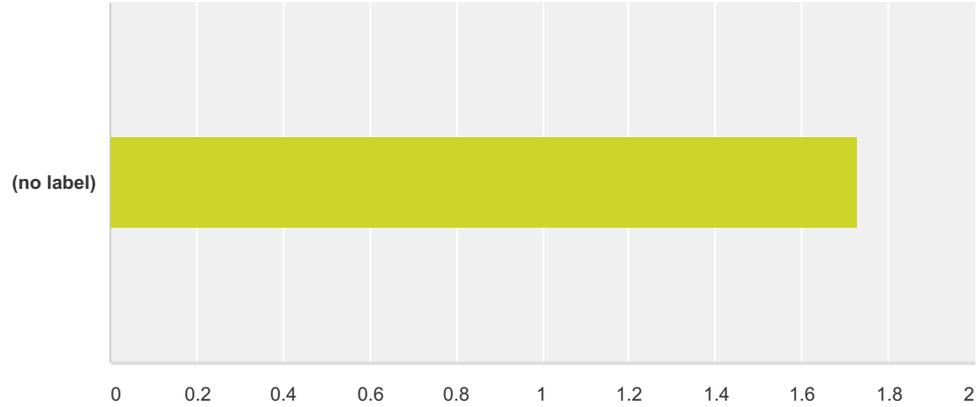
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	54.72% 29	20.75% 11	11.32% 6	13.21% 7	53	1.83

#	Suggested revisions for standards:	Date
1	Rigor is not the major issue I'm concerned about ... will teachers have the time to be as rigorous as they'd like, or will they only have the time to skim the surface? Back to our standards being a mile wide and an inch deep. (Sigh!) I was hoping Missouri would address that more this round.	12/2/2015 2:43 PM
2	Standard should be created to describe how the seasons differ and affect humans and animals for kindergarten. This will help set a rigorous path.	12/1/2015 9:15 PM
3	Teachers will need to have PD in understanding how to read the NGSS. Engineering standards need to be added.	12/1/2015 9:26 AM
4	Kindergarten: There is only one standard: Life science concepts to just use observations is not rigorous enough. Three dimensional learning includes doing science, not just making observations. First Grade: Add: "Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive" This will help promote rigor. Second Grade: Replace "Predict and Investigate" with Plan and conduct an investigation... Fourth Grade: Rigorous, however, only noting that they should only study that plants reproduce is naive. Animal structures can be discussed, such as animal size, color of feathers, nest building skills - plenty of non sexual examples to consider. Fifth Grade: Compare and Contrast as a DOK is not rigorous and only promotes memorization.	11/30/2015 10:01 PM
5	Rigor not at 1st grade (same as Kindergarten)	11/30/2015 11:22 AM
6	Standards that say "Identify" are not rigorous. They are rigorous at K, 1, but low rigor as you go up the grade levels.	11/20/2015 2:54 PM
7	I appreciate the deeper thought involved in using the standards, the basic understanding needed to accomplish those standards need to be clearly stated. Many people will be confused by what exactly should be covered and it is not clear.	11/16/2015 2:27 PM
8	Use the NGSS.	11/13/2015 11:00 AM
9	Seems to difficult	11/11/2015 2:15 PM
10	Too rigorous. Not developmentally appropriate.	11/9/2015 3:19 PM

From Molecules to
Organisms: Structures and
Process (LS1)

Q42 The majority of the standards in this strand can be assessed in the classroom and/or on a state assessment.

Answered: 51 Skipped: 209



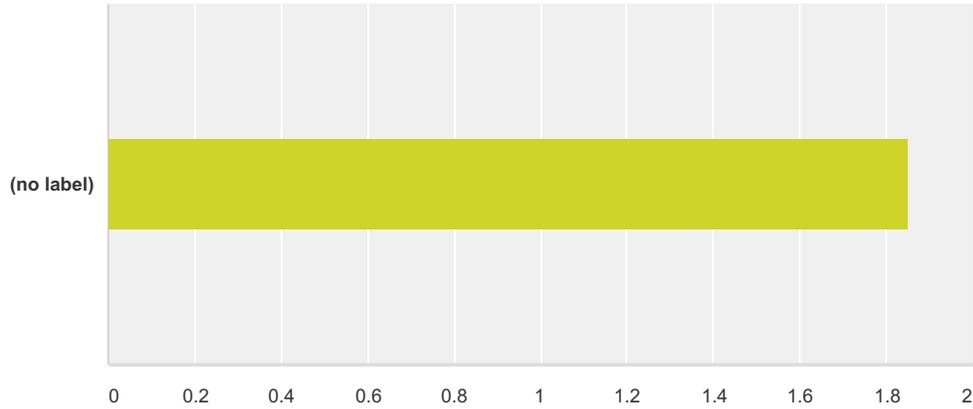
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	56.86% 29	23.53% 12	9.80% 5	9.80% 5	51	1.73

#	Suggested revisions for standards:	Date
1	I would need to see a few sample state assessment questions before I comment.	12/2/2015 2:43 PM
2	Teachers will need to have PD in understanding how to read the NGSS. Engineering standards need to be added.	12/1/2015 9:26 AM
3	Can be assessed in the classroom, probably, but I have doubts these Performance tasks can truly be assessed in a standardized state level assessment	11/23/2015 1:49 PM
4	The standards need to be written more clearly.	11/16/2015 2:27 PM
5	The way it is written makes assessment very subjective and not concrete.	11/16/2015 2:22 PM
6	Use the NGSS.	11/13/2015 11:00 AM

From Molecules to Organisms: Structures and Process (LS1)

Q43 The standards in this strand are understandable to educators and explainable to parents and other stakeholders.

Answered: 53 Skipped: 207



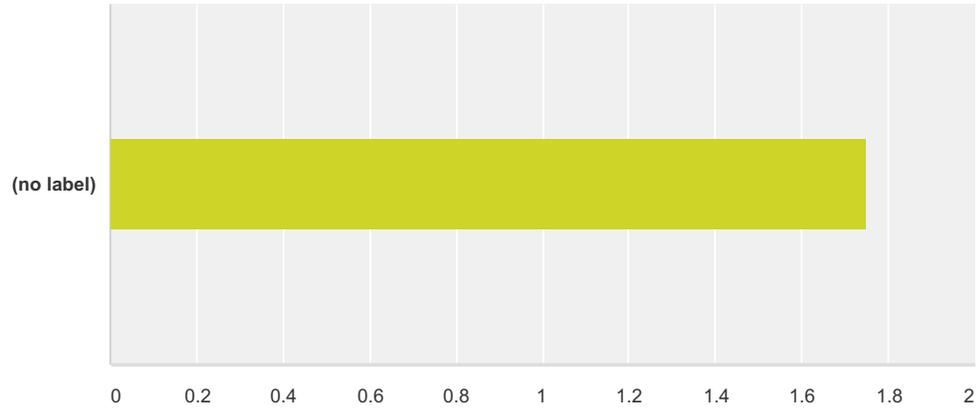
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	56.60% 30	16.98% 9	11.32% 6	15.09% 8	53	1.85

#	Suggested revisions for standards:	Date
1	I think an average teacher would read a standard and not have a clue where to begin. The standards are v-e-r-y broad!	12/2/2015 2:43 PM
2	Teachers will need to have PD in understanding how to read the NGSS. Engineering standards need to be added.	12/1/2015 9:26 AM
3	Performance expectation LS1A for 1st grade is confusing should be rewritten to more clearly reflect the concept of structures helping plants and animals to get what they need to survive. Page 43 typos: "Structures" "Reproduction" The supporting standard fourth grade LS1A very confusing. The word "Organs" should be changed to Structures. The word "Plant" should be eliminated since both plants AND Animals have structures needed for reproduction. Page 34 Second Grade LS1A Supporting strand should be changed to read "Identify and compare the physical structures of plants and animals and their function..."	11/23/2015 1:49 PM
4	Especially in the first grade standards, there is not enough clarity in what information is expected to be shown through the activity stated in the standard.	11/16/2015 2:27 PM
5	Use the NGSS.	11/13/2015 11:00 AM
6	I, as an educator, do not understand it.	11/11/2015 2:15 PM
7	Unclear what materials would be used and very vague standard. If you want consistency across the state then the standard needs to be more specific.	11/9/2015 3:19 PM
8	The standards are very vague and do not give a good picture of what needs to be taught. The information needs to be more specific.	11/2/2015 5:22 PM
9	3rd grade says only the life cycle of animals. It needs to include that of plants as well.	11/2/2015 5:16 PM

From Molecules to Organisms: Structures and Process (LS1)

Q44 The standards in this strand represent the necessary content for a student to reach college and/or career readiness upon graduation.

Answered: 51 Skipped: 209



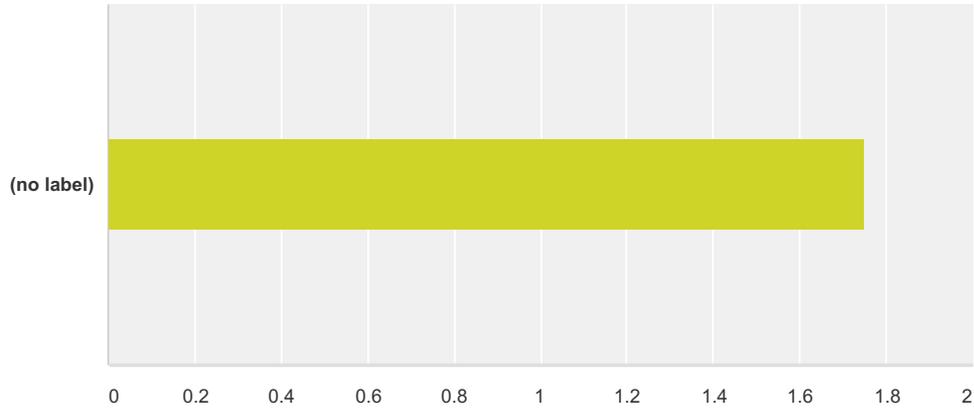
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	56.86% 29	25.49% 13	3.92% 2	13.73% 7	51	1.75

#	Suggested revisions for standards:	Date
1	Use the NGSS.	11/13/2015 11:00 AM

From Molecules to
Organisms: Structures and
Process (LS1)

Q45 The standards in this strand are accurate and encompass the breadth of the content.

Answered: 52 Skipped: 208



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	57.69% 30	21.15% 11	9.62% 5	11.54% 6	52	1.75

#	Suggested revisions for standards:	Date
1	.	11/30/2015 10:01 PM
2	See below	11/30/2015 11:22 AM
3	Use the NGSS.	11/13/2015 11:00 AM
4	No life cycle of plants included K-5.	11/2/2015 5:25 PM

**Q46 Overall comments regarding the
proposed standards for From Molecules to
Organisms: Structures and Process (LS1):**

Answered: 25 Skipped: 235

#	Responses	Date
1	Kindergarten - LS1C (Use observations to describe patterns of what plants and animals (including humans) need to survive) * Glad to see this standard included. 3rd Grade - LS1B (Growth and Development of Organism) * I don't like how they are asking the children to develop a model to compare and contrast life cycles, instead of allowing them to identify and sequence the life cycles. I understand that they are looking for higher level critical thinking, but they need the basics first and then they could develop the model as an additional standard.	12/2/2015 8:05 PM
2	Drop the 5th grade standard (LS1-A) regarding the major organs and organ systems of animals. Also, drop LS1-C. Neither of these are necessary at the 5th grade level since so much time is given in primary grades.	12/2/2015 7:47 PM
3	I do want to comment on the Story Lines for K-5 Science ... I feel they will be very beneficial in guiding teachers as they prepare their lesson plans in the future.	12/2/2015 2:43 PM
4	These proposed standards are too broad for upper elementary. It will be very difficult to get through all of these standards in an appropriate amount of time. Limit the units to no more than 5.	12/1/2015 7:44 PM
5	There is no mention of ENGINEERING in any of the grade levels K-12; if we are to prepare our students for STEM and being able to compete with other states/countries, it is vital that we embed engineering into our standards.	12/1/2015 9:26 AM
6	A concern with the standards as assigned is that it appears that the team who wrote them wanted to make sure that every grade level had exposure to most of the categories. This is setting up students to hit several topics quickly and superficially, skim the surface and not go deeply into content LS1.A Structure and Function 1st, 2nd, 4th and 5th LS1.B Growth and Development of Organisms 3rd Grade only - this is a huge concern - Understanding how living things grow and develop is vital to understanding biology. LS1.C Organization for Matter and Energy Flow in Organisms Kindergarten and 5th grade LS1.D Information Processing 4th Grade Only	11/30/2015 10:01 PM
7	Be more specific about life cycles- more like the current standards. Also the basic plant life cycle should be included	11/30/2015 3:26 PM
8	3rd grade.. be more specific about life cycles - more like current standards Basic plant life cycle should be included.	11/30/2015 2:29 PM
9	Be more specific about life cycles- more like current standards. Basic plant life cycle should be included.	11/30/2015 2:28 PM
10	Be more specific about life cycles-more like current standards. Basic plant life cycle should be included	11/30/2015 2:10 PM
11	4th Graders are not developmentally ready to learn about reproduction.	11/30/2015 1:28 PM
12	LS1-A = First part of 5th grade is not complete- sentence not complete after the word different	11/30/2015 11:22 AM
13	Add additional standard that states: Identify and compare the physical structures of a variety of plants (e.g., stem, leaves, flowers, seeds, roots)	11/30/2015 9:35 AM
14	Add additional standard that states: Identify and compare the physical structures of a variety of plants (e.g. stem, leaves, flowers, seeds, roots)	11/30/2015 9:34 AM
15	Add additional standard that states: "Identify and compare the physical structures of a variety of plants (e.g., stem, leaves, flowers, seeds, roots).	11/30/2015 9:34 AM
16	LS1A - 1st grade - what does it mean by mimicking? When will plant parts and structures be taught? LS1A - 3rd grade - Why construct an argument? What are we arguing about?	11/29/2015 8:56 PM
17	Why are seasons totally removed from kindergarten> LS1A - wording for 1st grade standard is very confusing LS1A for 3rd grade - construct an argument doesn't seem to go with the plant and animal structures. LS1C - 3rd grade - What would be an argument for this standard?	11/29/2015 8:39 PM
18	How will 3.1.D.1.a look for a first grader?	11/29/2015 7:47 PM
19	Overall, the science standards have been extremely pushed down. Many standards have been added to each grade level, but nothing has been taken off. We need to prioritize the standards and give teachers an amount of standards that they can teach well with the time they are given. The science standard are very wordy and technically written. Writing them in student-friendly language would help curriculum writers, teachers and students alike.	11/24/2015 12:42 PM

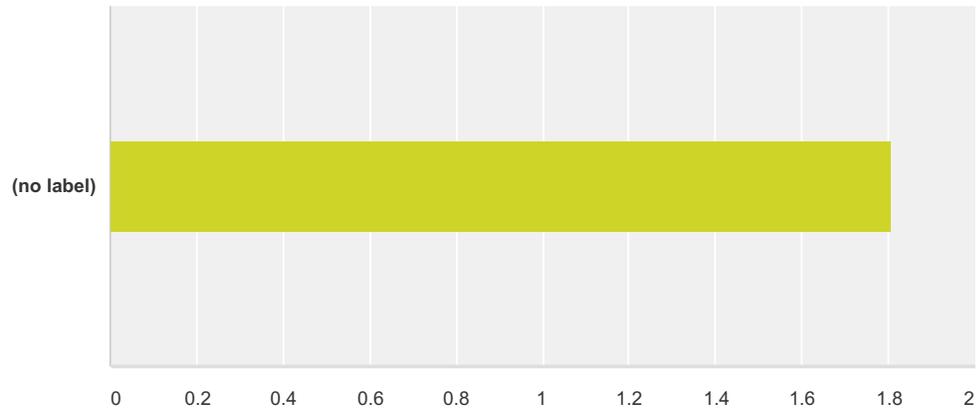
HB1490 Work Group - Science K-5

20	This survey linked this page to LS2 until Nov. 20 and so people thinking they were reviewing LS2 up to that point may have been posting on this page. Document does a poor job of defining meaning of and differences between Performance Expectation, Supporting Standard, and Core Idea.	11/23/2015 1:49 PM
21	There is so much content on this standard. Where are the Science & Engineering Practices and Cross cutting Concepts? Once again, there is one statement (standard) from this section in each grade level. Please cluster them so we can organize units.	11/20/2015 2:54 PM
22	The current science standards for 3rd grade are not completely accurate (example: life cycles).	11/18/2015 2:47 PM
23	Your existing standards for science in this section are incorrect. 3rd Grade as never taught life cycles for living things such as frogs and butterflies.	11/18/2015 2:47 PM
24	I really feel that the first grade standards need some solid revision/clarification. They are not clear and would be very difficult to keep learning consistent across the state.	11/16/2015 2:27 PM
25	Let's use the Next Generation Science Standards. This is ridiculous that we spend so much time and money on trying to figure out what standards to teach our kids when the Next Generation Science Standards are already written and easy to follow. Quit trying to reinvent the wheel.	11/13/2015 11:00 AM

Ecosystems: Interactions,
Energy, and Dynamics
(LS2)

Q48 The standards in this strand are developmentally appropriate.

Answered: 31 Skipped: 229



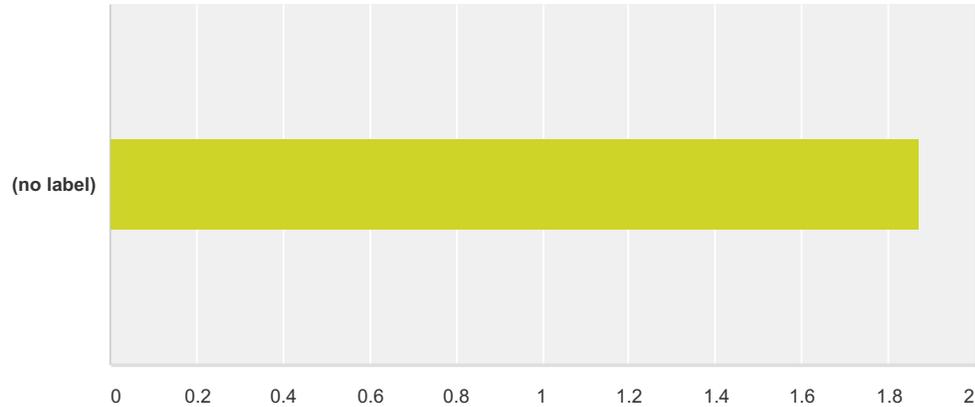
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	45.16% 14	35.48% 11	12.90% 4	6.45% 2	31	1.81

#	Suggested revisions for standards:	Date
1	I was appropriate for third grades to start learning about food chains and expanding this with food webs in fourth grade.	12/2/2015 5:37 AM
2	In Kindergarten, it should be about the world around us, including habitats, plants, animals, the physical world.	12/1/2015 12:12 PM
3	Reproduction with animals in 4th grade is NOT developmentally appropriate...	11/30/2015 1:27 PM
4	reproduction for fourth graders isn't appropriate.	11/30/2015 1:26 PM
5	Only worried about the missing 8 standards about predator, prey, consumers, producers, decomposers	11/30/2015 1:09 PM
6	There are 8 missing standards that act as prior knowledge for food chains and webs. It is highly concerning that there might not be enough prior knowledge.	11/30/2015 1:09 PM
7	Use the NGSS.	11/13/2015 11:01 AM

Ecosystems:
Interactions, Energy,
and Dynamics (LS2)

Q49 The standards in this strand follow a coherent path through and across all grade levels.

Answered: 31 Skipped: 229



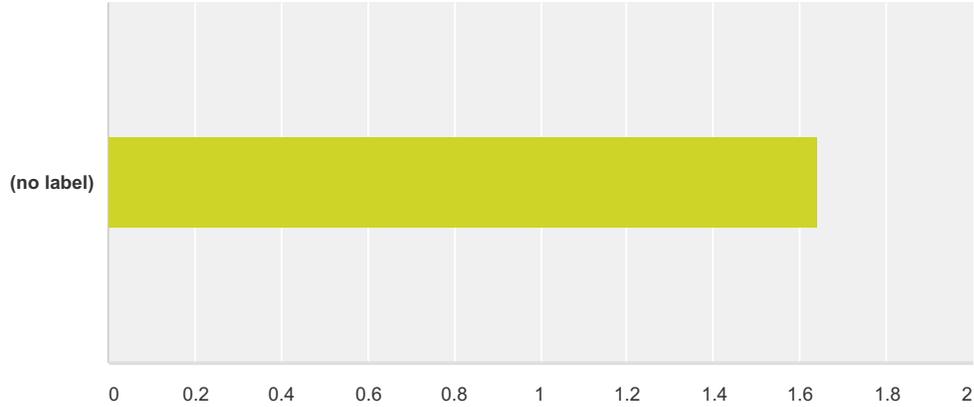
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	45.16% 14	32.26% 10	12.90% 4	9.68% 3	31	1.87

#	Suggested revisions for standards:	Date
1	I must say these standards are an improvement over what we have. However, even though there are fewer standards per topic, they are very broad and would require an extreme number of learning targets to be taught before you would get to the actual requirement of the standard. Verbage such as: Plan and conduct a fair test, Plan and conduct an investigation, Use/ provide evidence to construct an explanation, Develop a model, Support an argument - take a lot of time to truly teach an encompassing unit to the depth our students need ... and can we truly say mastery learning is taking place if we do not give our students the TIME NEEDED to actually investigate and understand the concepts presented? These are welcome concepts - but it still seems like a lot of material to be covered in a year - to the depth we as educators would like it taught, and to the depth that our students need and deserve.	12/2/2015 2:44 PM
2	I only see LS2 in second and fifth grade.	12/1/2015 11:27 PM
3	These conceptual paths are weak. The concepts in this pathway can't begin before grade 2, which is reflected. Grade 3: Add: Construct an argument that some animals form groups that help members survive. LS2.D Grade 3: Add: Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. LS2.C	11/30/2015 10:22 PM
4	5th grade "Strand 3" Supporting Standard LS4D -Classification - belongs under LS3A, also, "using a dichotomous key" should be removed since it is an activity tied to cross cutting concept and is not really a "Standard" Organism interactions (e.g. pollination, seed dispersal, camouflage, migration, hibernation, defense mechanism) (LS2A) should be moved to LS1A and LS1D since these concepts are a better fit for these strands and also it will enable the 5th grade to focus in greater depth on the key concepts of energy flow and nutrient cycling.	11/23/2015 2:38 PM
5	Use the NGSS.	11/13/2015 11:01 AM

Ecosystems: Interactions, Energy, and Dynamics (LS2)

Q50 The standards set a rigorous path of high expectations for students at each grade level.

Answered: 28 Skipped: 232



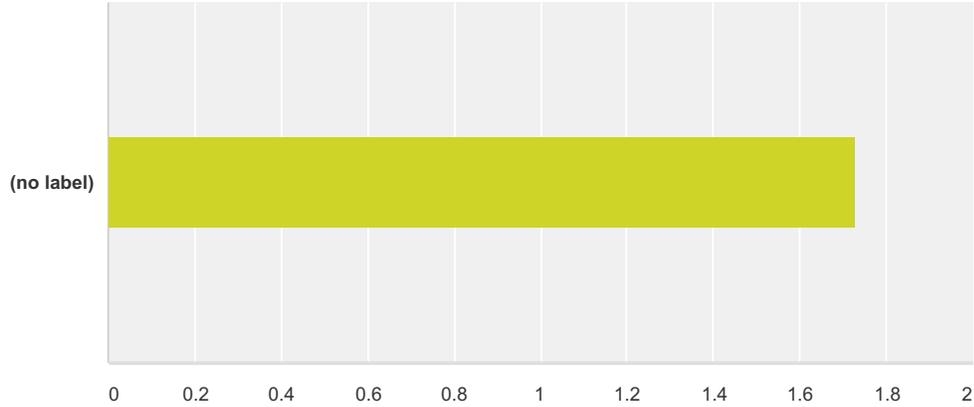
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	57.14% 16	28.57% 8	7.14% 2	7.14% 2	28	1.64

#	Suggested revisions for standards:	Date
1	Rigor is not the major issue I'm concerned about ... will teachers have the time to be as rigorous as they'd like, or will they only have the time to skim the surface? Back to our standards being a mile wide and an inch deep. (Sigh!) I was hoping Missouri would address that more this round.	12/2/2015 2:44 PM
2	The concepts in this pathway can't begin before grade 2, which is reflected. Grade 3: Add: Construct an argument that some animals form groups that help members survive. LS2.D Grade 3: Add: Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. LS2.C	11/30/2015 10:22 PM
3	See overall comments below	11/23/2015 2:38 PM
4	Use the NGSS.	11/13/2015 11:01 AM

Ecosystems:
Interactions, Energy,
and Dynamics (LS2)

Q51 The majority of the standards in this strand can be assessed in the classroom and/or on a state assessment.

Answered: 30 Skipped: 230



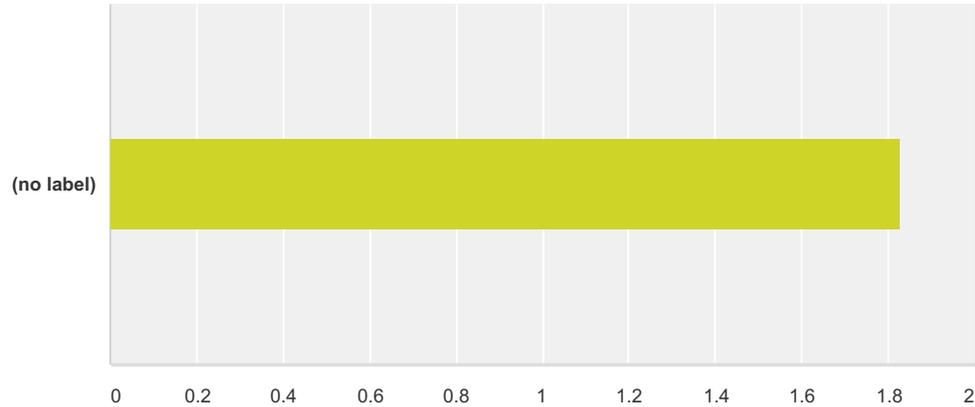
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	50.00% 15	33.33% 10	10.00% 3	6.67% 2	30	1.73

#	Suggested revisions for standards:	Date
1	I would need to see a few sample state assessment questions before I comment.	12/2/2015 2:44 PM
2	Since these standards are assessed at only fifth grade, they are acceptable because they will all be taught in third through fifth grade. It is imperative that the third, fourth, and fifth grade teachers share strategies and lessons to make sure all the standards are covered.	12/2/2015 5:37 AM
3	The concepts in this pathway can't begin before grade 2, which is reflected. Grade 3: Add: Construct an argument that some animals form groups that help members survive. LS2.D Grade 3: Add: Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. LS2.C	11/30/2015 10:22 PM
4	Can be assessed in the classroom, probably, but I have doubts whether these Performance tasks can truly be assessed in a standardized state level assessment. All performance expectations should reflect examples of Project Based Learning strategies.	11/23/2015 2:38 PM
5	Standards are way too broad.	11/16/2015 2:47 PM
6	Use the NGSS.	11/13/2015 11:01 AM

Ecosystems: Interactions,
Energy, and Dynamics
(LS2)

Q52 The standards in this strand are understandable to educators and explainable to parents and other stakeholders.

Answered: 29 Skipped: 231



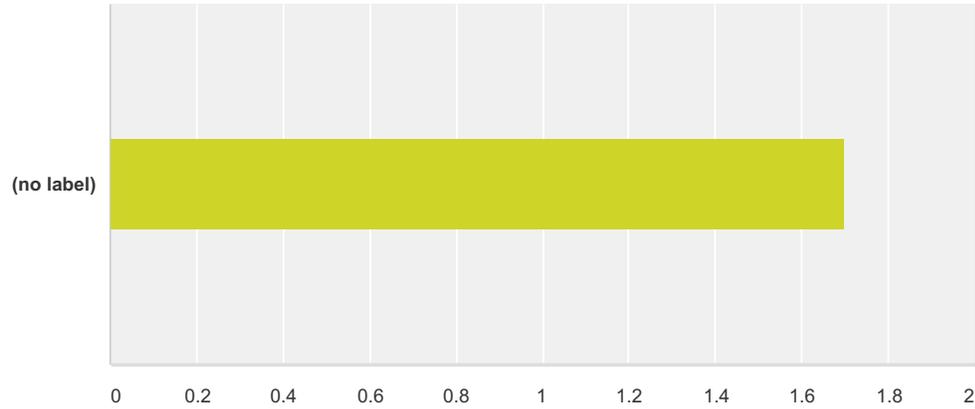
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	51.72% 15	20.69% 6	20.69% 6	6.90% 2	29	1.83

#	Suggested revisions for standards:	Date
1	I think an average teacher would read a standard and not have a clue where to begin. The standards are v-e-r-y broad!	12/2/2015 2:44 PM
2	Some of the wording is not as easy to understand as the previous standards. Also some standards need more examples.	12/2/2015 5:37 AM
3	Teachers will need to have PD in understanding how to read the NGSS.	12/1/2015 9:27 AM
4	The concepts in this pathway can't begin before grade 2, which is reflected. Grade 3: Add: Construct an argument that some animals form groups that help members survive. LS2.D Grade 3: Add: Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. LS2.C	11/30/2015 10:22 PM
5	These standards should strive to define and distinguish between "Environments" "Ecosystems" and "Habitats" if all three of these terms are to be used.	11/23/2015 2:38 PM
6	Use the NGSS.	11/13/2015 11:01 AM

Ecosystems: Interactions, Energy, and Dynamics (LS2)

Q53 The standards in this strand represent the necessary content for a student to reach college and/or career readiness upon graduation.

Answered: 30 Skipped: 230



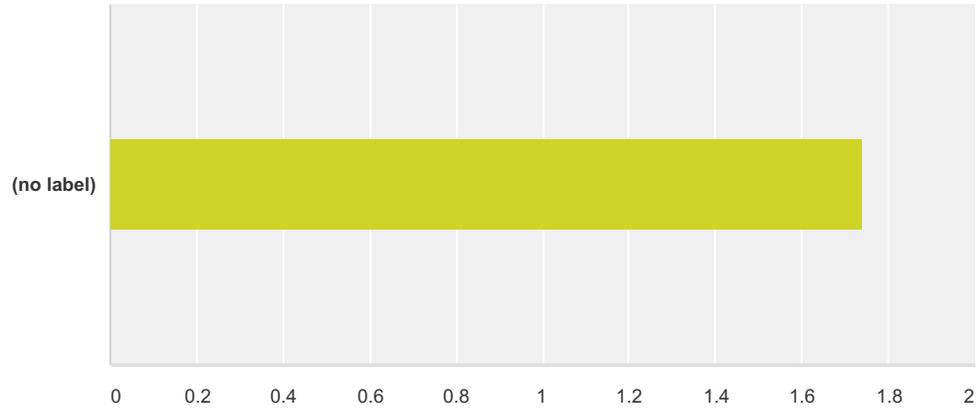
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	53.33% 16	30.00% 9	10.00% 3	6.67% 2	30	1.70

#	Suggested revisions for standards:	Date
1	These skills are acceptable for this level and can be easily differentiated for advanced learners.	12/2/2015 5:37 AM
2	Engineering standards need to be added.	12/1/2015 9:27 AM
3	The concepts in this pathway can't begin before grade 2, which is reflected. Grade 3: Add: Construct an argument that some animals form groups that help members survive. LS2.D Grade 3: Add: Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. LS2.C	11/30/2015 10:22 PM
4	Use the NGSS.	11/13/2015 11:01 AM

Ecosystems:
Interactions, Energy,
and Dynamics (LS2)

Q54 The standards in this strand are accurate and encompass the breadth of the content.

Answered: 31 Skipped: 229



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	48.39% 15	35.48% 11	9.68% 3	6.45% 2	31	1.74

#	Suggested revisions for standards:	Date
1	They are very comprehensive.	12/2/2015 5:37 AM
2	The concepts in this pathway can't begin before grade 2, which is reflected. Grade 3: Add: Construct an argument that some animals form groups that help members survive. LS2.D Grade 3: Add: Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. LS2.C	11/30/2015 10:22 PM
3	These standards should strive to define and distinguish between "Environments" "Ecosystems" and "Habitats" if all three of these terms are to be used. Although "adapptions" is technically a real word, all instances of the use of this word in this document are misused and should be changed to "Adaptations" as this is how this term is used throughout the field of science as well as literature of science education.	11/23/2015 2:38 PM
4	Use the NGSS.	11/13/2015 11:01 AM

**Q55 Overall comments regarding the
proposed standards for Ecosystems:
Interactions, Energy, and Dynamics (LS2):**

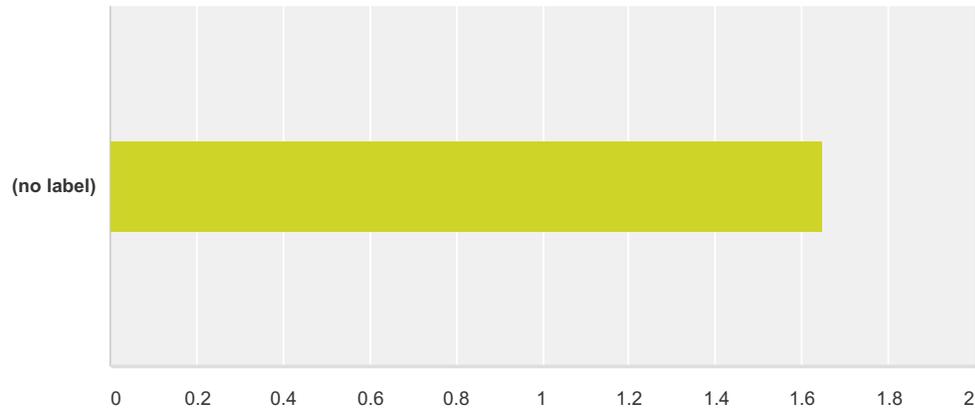
Answered: 10 Skipped: 250

#	Responses	Date
1	I do want to comment on the Story Lines for K-5 Science ... I feel they will be very beneficial in guiding teachers as they prepare their lesson plans in the future.	12/2/2015 2:44 PM
2	Since most elementary schools spend the majority of their instructional time on reading and math, it is difficult to teach all the proposed standards. I think there needs to be a reduction in the number of standards to be covered in these grade levels. DESE needs to ask elementary teachers to be in the committees that write the standards so they add input on the appropriate numbers of standards that can be learned well in each grade level.	12/2/2015 5:37 AM
3	There is no mention of ENGINEERING in any of the grade levels K-12; if we are to prepare our students for STEM and being able to compete with other states/countries, it is vital that we embed engineering into our standards.	12/1/2015 9:27 AM
4	This pathway is weak. There is a significant need to understand how energy moves through ecosystems, and how the members of communities, habitats and ecosystems work together. LS2.A Interdependent Relationships in Ecosystems 2nd Grade, 5th Grade LS2.B Cycles of Matter and Energy Transfer in Ecosystems 5th Grade - LS2.C Ecosystem Dynamics, Functioning, and Resilience No grades cover this concept in proposed standards - LS2.D Social Interactions and Group Behavior No grades cover this concept in proposed standards	11/30/2015 10:22 PM
5	I do not think reproduction is an appropriate topic for fourth graders. I think it is wildly inappropriate for this age of students	11/30/2015 1:26 PM
6	Concerned about prior knowledge for students as we implement these since so many concepts move multiple grade levels. Also feeling like many standards are too vague	11/30/2015 1:15 PM
7	LS2-A Develop a simple model that mimics the function o an animal in dispersing seeds or pollinating plants. (How are we assessing this?)	11/29/2015 8:08 PM
8	Overall, the science standards have been extremely pushed down. Many standards have been added to each grade level, but nothing has been taken off. We need to prioritize the standards and give teachers an amount of standards that they can teach well with the time they are given. The science standard are very wordy and technically written. Writing them in student-friendly language would help curriculum writers, teachers and students alike.	11/24/2015 12:42 PM
9	This survey linked LS2 to the LS1 survey page until Nov. 20 and so people thinking they were reviewing LS2 up to that point may have been posting on the LS1 page. Document does a poor job of defining meaning of and differences between Performance Expectation, Supporting Standard, and Core Idea. "Storylines" all grade levels do not adequately address the importance of using science to understand natural organisms, systems and ecological interactions nor the benefits of using these topics within science education practices, and particularly at the 5th grade level where ecosystems, interactions between organisms and their environments, energy flow and matter cycling are such a prominent feature of these standards at this level. Although "adaptions" is technically a real word, all instances of the use of this word in this document should be changed to "Adaptations" as this is how this term is used throughout the field of science as well as literature of science education. These standards should strive to define and distinguish between "Environments" "Ecosystems" and "Habitats" if all three of these terms are to be used. Organism interactions (e.g. pollination, seed dispersal, camouflage, migration, hibernation, defense mechanism) (LS2A) should be moved to LS1A and LS1D.	11/23/2015 2:38 PM
10	Let's use the Next Generation Science Standards. This is ridiculous that we spend so much time and money on trying to figure out what standards to teach our kids when the Next Generation Science Standards are already written and easy to follow. Quit trying to reinvent the wheel.	11/13/2015 11:01 AM

Heredity and Inheritance: Variation of Traits (LS3)

Q57 The standards in this strand are developmentally appropriate.

Answered: 34 Skipped: 226



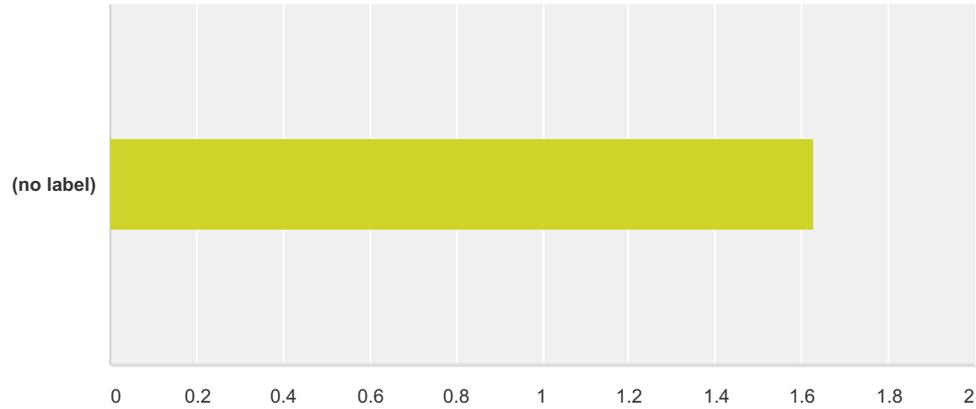
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	64.71% 22	11.76% 4	17.65% 6	5.88% 2	34	1.65

#	Suggested revisions for standards:	Date
1	Science- Standard LS 4 B about the Natural Selection and finding mates needs to be deleted.(I don't think that this is a necessary concept to learn about at this age.)	12/2/2015 2:37 PM
2	Follow nex gen science standards	12/2/2015 7:54 AM
3	Kindergarten should be investing about the characteristics of our body (head, skin, hands, eyes, hair, teeth, skeleton, hearts, and breathing. And the five senses.	12/1/2015 12:14 PM
4	Inheritance of traits- provide guidelines on which organisms to teach/cover.	11/30/2015 3:28 PM
5	3rd grade - traits... more guidance on which organisms to cover.	11/30/2015 2:31 PM
6	Inheritance of traits-It'd be nice to have guidance on which organisms to cover	11/30/2015 2:12 PM
7	This strand is incomplete. It does not include all the suggested standards in the Science Frameworks. Also, there is nothing here that would lead to understandings of biological variation. Once again, the standards are split up in different grade levels making it challenging to develop units and to select instructional materials.	11/20/2015 2:45 PM
8	Use the NGSS.	11/13/2015 11:02 AM
9	LS3A was listed in proposed standards, but not on the crosswalk	11/9/2015 3:07 PM
10	I do not feel it is appropriate that third grade is supposed to learn about traits, but then not carry on the learning with fourth and fifth grades.	11/4/2015 11:27 AM
11	Students may not have enough background knowledge to complete this standard in 3rd grade.	11/2/2015 5:38 PM
12	While "constructing scientific arguments" is a nice goal, this is a writing skill that couldn't possibly be addressed and applied until later in the year in 3rd grade.	11/2/2015 5:30 PM

Heredity and Inheritance: Variation of Traits (LS3)

Q58 The standards in this strand follow a coherent path through and across all grade levels.

Answered: 32 Skipped: 228



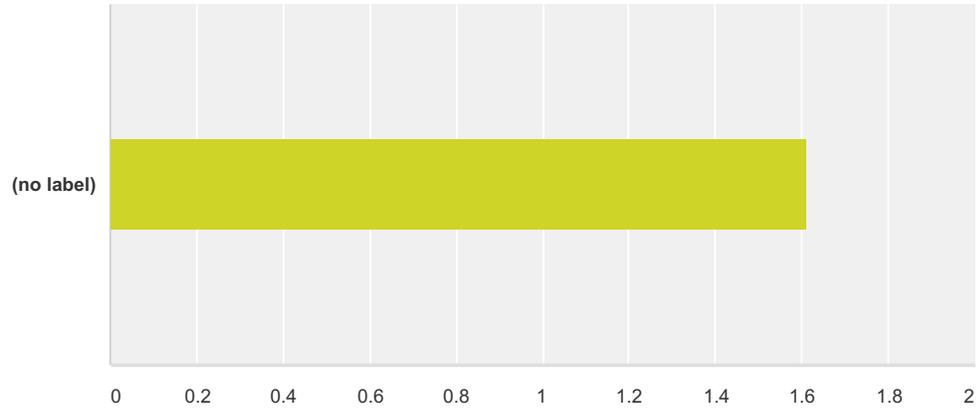
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	59.38% 19	25.00% 8	9.38% 3	6.25% 2	32	1.63

#	Suggested revisions for standards:	Date
1	follow nex gen science standards	12/2/2015 7:54 AM
2	This is an introduction into adaptation and how plants and animals are suited to different environments. 3 Dimensional learning would include more science and engineering terminology: Modify to: Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.	11/30/2015 10:44 PM
3	Use the NGSS.	11/13/2015 11:02 AM
4	Needs to be more clear. It seems like the writers tried to lump multiple gl's into one statement, which makes the standard too vague and unclear.	11/9/2015 3:07 PM

Heredity and Inheritance:
Variation of Traits (LS3)

Q59 The standards set a rigorous path of high expectations for students at each grade level.

Answered: 31 Skipped: 229



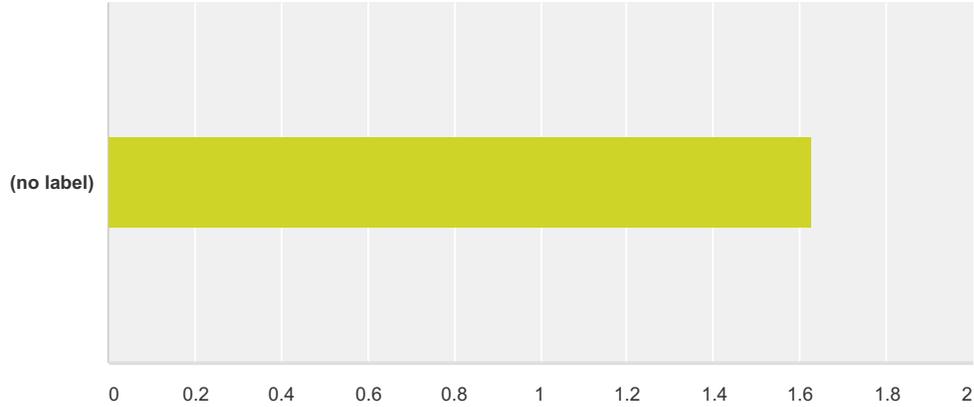
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	64.52% 20	16.13% 5	12.90% 4	6.45% 2	31	1.61

#	Suggested revisions for standards:	Date
1	This is an introduction into adaptation and how plants and animals are suited to different environments. 3 Dimensional learning would include more science and engineering terminology: Modify to: Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.	11/30/2015 10:44 PM
2	Use the NGSS.	11/13/2015 11:02 AM
3	I think the standards or wording of the standards have too high of expectations for younger grades.	11/4/2015 11:27 AM
4	Too difficult for 3rd grade	11/2/2015 5:38 PM

Heredity and Inheritance: Variation of Traits (LS3)

Q60 The majority of the standards in this strand can be assessed in the classroom and/or on a state assessment.

Answered: 32 Skipped: 228



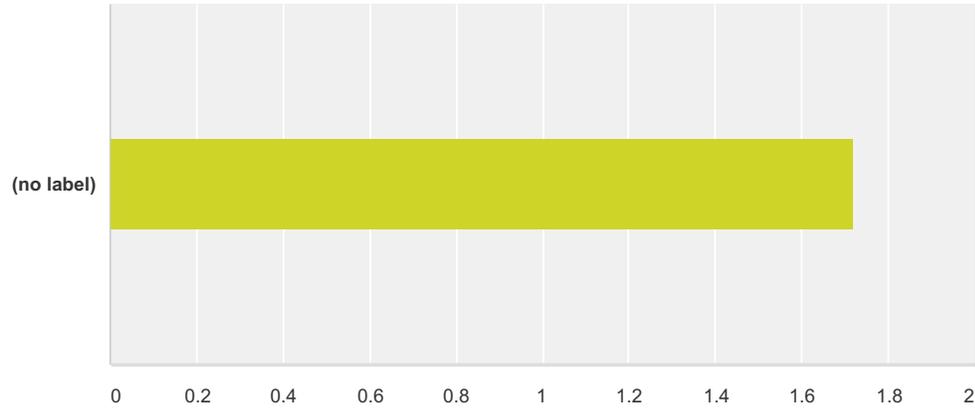
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	62.50% 20	18.75% 6	12.50% 4	6.25% 2	32	1.63

#	Suggested revisions for standards:	Date
1	follow nex gen science standards	12/2/2015 7:54 AM
2	This is an introduction into adaptation and how plants and animals are suited to different environments. 3 Dimensional learning would include more science and engineering terminology: Modify to: Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.	11/30/2015 10:44 PM
3	Use the NGSS.	11/13/2015 11:02 AM
4	Difficult to assess for third grade	11/2/2015 5:38 PM

Heredity and Inheritance:
Variation of Traits (LS3)

Q61 The standards in this strand are understandable to educators and explainable to parents and other stakeholders.

Answered: 32 Skipped: 228



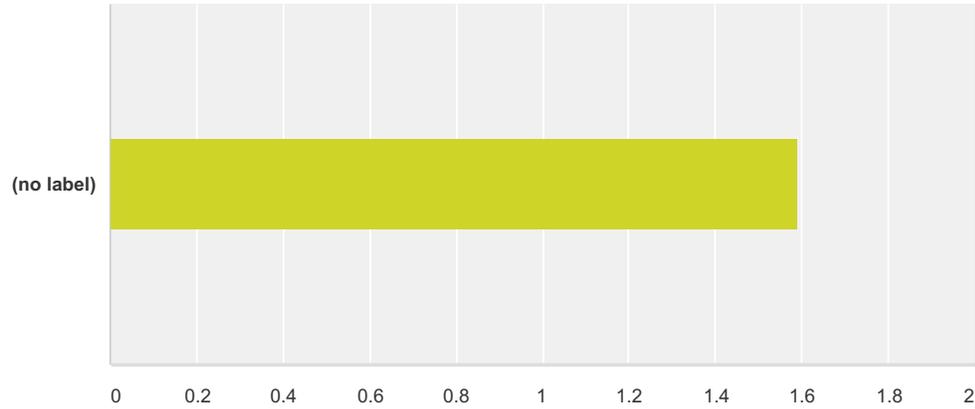
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	62.50% 20	12.50% 4	15.63% 5	9.38% 3	32	1.72

#	Suggested revisions for standards:	Date
1	follow nex gen science standards	12/2/2015 7:54 AM
2	Teachers will need PD in understanding how to read the NGSS.	12/1/2015 9:29 AM
3	This is an introduction into adaptation and how plants and animals are suited to different environments. 3 Dimensional learning would include more science and engineering terminology: Modify to: Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.	11/30/2015 10:44 PM
4	The document is not understandable.	11/20/2015 2:45 PM
5	Use the NGSS.	11/13/2015 11:02 AM
6	3rd grade - LS3A: Construct scientific arguments to support claims that some BEHAVIORS of organisms are inherent from parents and some are influenced by the environment -- (replace "characteristics" with "behaviors"- many third grade teachers will read characteristics and immediately think of physical characteristics, which are only influenced by DNA) 3rd grade - LS4C Adaptation: Construct an argument with evidence that in a particular ecosystem some organisms -- based on structural adaptations or behaviors -- can survive well, some survive less well, and some cannot survive at all. SUGGESTED REWORDING: Construct an argument with evidence that some organisms are particularly suited to their environment due to specialized structures. 3rd grade - LS4D Biodiversity and Humans: Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. SUGGESTED REWORDING: (unclear as written) Analyze the benefits and harmful effects on an ecosystem resulting from human activity.	11/12/2015 9:20 PM
7	Need examples on 3rd grade standard.	11/2/2015 5:38 PM

Heredity and Inheritance:
Variation of Traits (LS3)

Q62 The standards in this strand represent the necessary content for a student to reach college and/or career readiness upon graduation.

Answered: 32 Skipped: 228



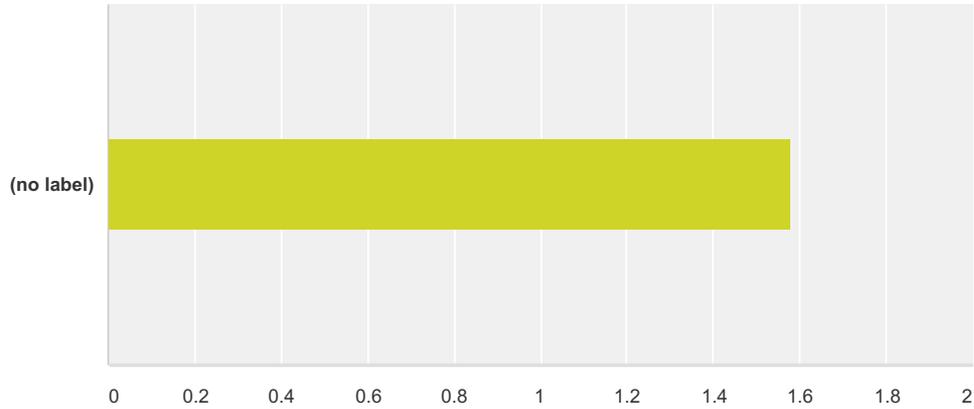
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	65.63% 21	15.63% 5	12.50% 4	6.25% 2	32	1.59

#	Suggested revisions for standards:	Date
1	follow nex gen science standards	12/2/2015 7:54 AM
2	Engineering standards need to be added	12/1/2015 9:29 AM
3	This is an introduction into adaptation and how plants and animals are suited to different environments. 3 Dimensional learning would include more science and engineering terminology: Modify to: Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these trains exists in a group of similar organisms.	11/30/2015 10:44 PM
4	Use the NGSS.	11/13/2015 11:02 AM

Heredity and Inheritance: Variation of Traits (LS3)

Q63 The standards in this strand are accurate and encompass the breadth of the content.

Answered: 31 Skipped: 229



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	67.74% 21	12.90% 4	12.90% 4	6.45% 2	31	1.58

#	Suggested revisions for standards:	Date
1	follow nex gen science standards	12/2/2015 7:54 AM
2	This is an introduction into adaptation and how plants and animals are suited to different environments. 3 Dimensional learning would include more science and engineering terminology: Modify to: Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.	11/30/2015 10:44 PM
3	Use the NGSS.	11/13/2015 11:02 AM
4	see suggested revisions above	11/12/2015 9:20 PM

Heredity and
Inheritance: Variation
of Traits (LS3)

**Q64 Overall comments regarding the
proposed standards for Heredity and
Inheritance: Variation of Traits (LS3):**

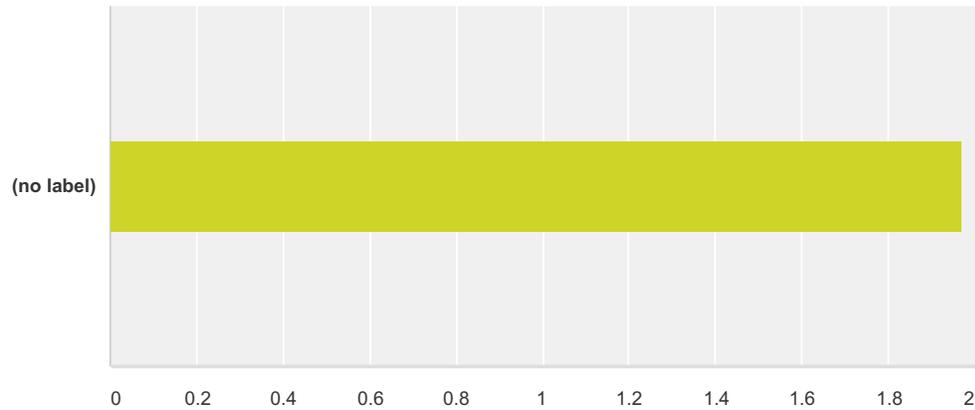
Answered: 13 Skipped: 247

#	Responses	Date
1	3rd Grade - LS3A (Inheritance of Traits) * I like it! I feel that it is important for children to have an understanding of how animals and people alike get their traits.	12/2/2015 8:06 PM
2	follow nex gen science standards	12/2/2015 7:54 AM
3	There is no mention of ENGINEERING in any of the grade levels K-12; if we are to prepare our students for STEM and being able to compete with other states/countries, it is vital that we embed engineering into our standards.	12/1/2015 9:29 AM
4	LS3.A Inheritance of Traits 1st Grade, 3rd Grade LS3.B Variation of Traits Not covered in any grade.	11/30/2015 10:44 PM
5	The proposed strand and standards are very general, however, the current standards are more detailed and explain how to get to the proposed standards. Details can be helpful, especially for young teachers.	11/30/2015 3:28 PM
6	The proposed standard is very general, however, the current standards are more detailed and explain how to get to the proposed standards. Details can be helpful especially for young teachers. (example: day/night cycle, changes in length of shadow, as the earth rotates what is the sun's position.)	11/30/2015 2:31 PM
7	The proposed standard is very general, however, the current standards are more detailed and explain how to get to the proposed standards. Details can be helpful especially for new teachers. Example: Day/night cycle, changes in length of shadow the day as earth rotates/sun's position)	11/30/2015 2:02 PM
8	LS3A - 1st grade - weird wording. 4.1.A.1.a - hate to see this standard deleted. It is important f LS3A - 3rd grade - Not age appropriate	11/29/2015 8:39 PM
9	LS3A seems rigorous for 3rd grade. Not sure they would be ready to construct an argument on this topic. LS1-A: How detailed do they want systems explained? LS2-A 4.2.A.4a is foundational might be better in 3rd grade but seems to be missing at other grade levels	11/29/2015 7:50 PM
10	Overall, the science standards have been extremely pushed down. Many standards have been added to each grade level, but nothing has been taken off. We need to prioritize the standards and give teachers an amount of standards that they can teach well with the time they are given. The science standard are very wordy and technically written. Writing them in student-friendly language would help curriculum writers, teachers and students alike.	11/24/2015 12:42 PM
11	There is not a standard related to variation. Once again, the Science and Engineering Practices and the Cross Cutting Concepts.	11/20/2015 2:45 PM
12	Let's use the Next Generation Science Standards. This is ridiculous that we spend so much time and money on trying to figure out what standards to teach our kids when the Next Generation Science Standards are already written and easy to follow. Quit trying to reinvent the wheel.	11/13/2015 11:02 AM
13	I feel there should be more standards about traits for fourth and fifth grades.	11/4/2015 11:27 AM

Q66 The standards in this strand are developmentally appropriate.

Biological
Evolution: Unity
and Diversity
(LS4)

Answered: 34 Skipped: 226



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	50.00% 17	17.65% 6	17.65% 6	14.71% 5	34	1.97

#	Suggested revisions for standards:	Date
1	Science- Standard LS 4 B about the Natural Selection and finding mates needs to be deleted.(I don't think that this is a necessary concept to learn about at this age.)	12/2/2015 2:39 PM
2	follow nex gen science standards	12/2/2015 7:56 AM
3	Grade 2: LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats. Grade 3: LS4-1 Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. This is important as in ESS Grade 4, students are expected to look at fossil records to make claims as to how the earth has changed over time, but they would not have had any fossil study - 4th grade teachers will have to teach this above standard to support the fossil record to date earth.	11/30/2015 10:56 PM
4	Natural selection- this is very general. I would like to see more details	11/30/2015 3:29 PM
5	This is a strand that is too deep for third grade meaning and understanding.	11/30/2015 2:54 PM
6	3rd grade: Natural selection: this is very general, more details.	11/30/2015 2:46 PM
7	Natural selection--too general	11/30/2015 2:14 PM
8	natural selection- This is very general. I would like more detail.	11/30/2015 2:04 PM
9	The sections on Natural Selection and Biodiversity and Humans is not appropriate for third grade. The vocabulary and concepts are too difficult. The section on Adaptation, however, is appropriate.	11/30/2015 10:32 AM
10	This should be in 5th grade not 4th.	11/29/2015 8:12 PM
11	Third graders are not ready to begin to even understand these concepts much less, understand the meaning of the word merit, structural adaptations, and inherent.	11/13/2015 11:32 AM
12	Use the NGSS.	11/13/2015 11:03 AM
13	Any time evolution is mentioned it should be said that it is a "THEORY".	11/10/2015 1:59 PM

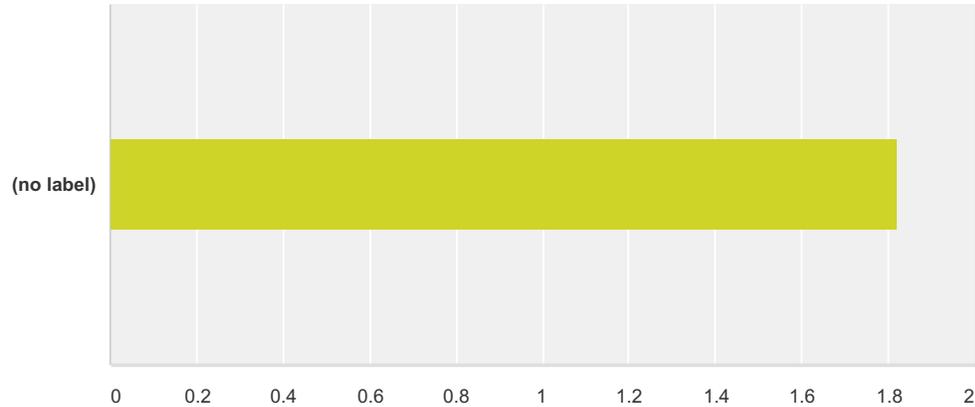
HB1490 Work Group - Science K-5

14	I like the standard on evolution with using fossils to compare and contrast to organisms present today, learn about organisms no longer present, and use evidence to discuss the environment long ago. I do think that the study of plate tectonics, rocks, and soil done in 4th grade ties in with this topic. I believe it helps the students to understand how fossils are made if they understand soil/rocks and plate tectonics play a role in understanding what the Earth was like back then. I think this standard should also be discussed in 4th grade.	11/5/2015 12:22 PM
15	Mating should not be taught in 3rd grade.	11/2/2015 5:41 PM
16	3rd graders are not ready to talk about "mating".	11/2/2015 5:28 PM
17	I do not think third grade students are ready to learn about animals having advantages finding mates. This could lead to many questions that are not appropriate discussions in third grade.	11/2/2015 5:25 PM

Biological Evolution:
Unity and Diversity
(LS4)

Q67 The standards in this strand follow a coherent path through and across all grade levels.

Answered: 33 Skipped: 227



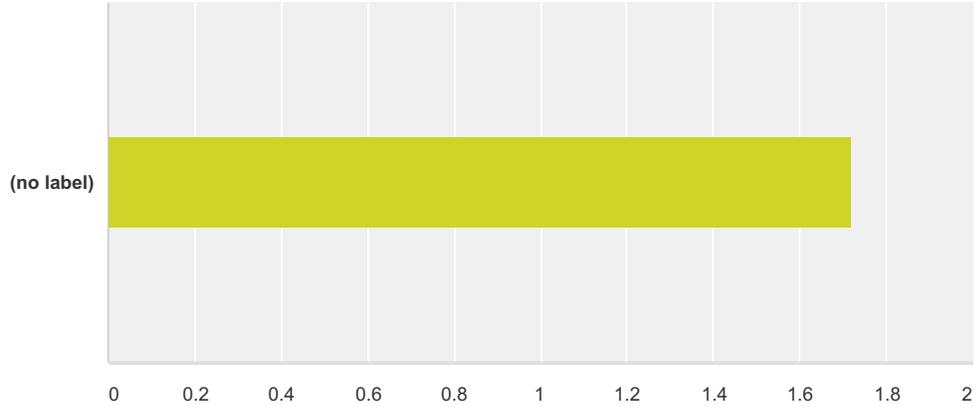
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	48.48% 16	33.33% 11	6.06% 2	12.12% 4	33	1.82

#	Suggested revisions for standards:	Date
1	follow nex gen science standards	12/2/2015 7:56 AM
2	only in one grade level	12/1/2015 11:29 PM
3	Grade 2: LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats. Grade 3: LS4-1 Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. This is important as in ESS Grade 4, students are expected to look at fossil records to make claims as to how the earth has changed over time, but they would not have had any fossil study - 4th grade teachers will have to teach this above standard to support the fossil record to date earth.	11/30/2015 10:56 PM
4	Which ecosystems should be covered? What adaptations should be taught?	11/30/2015 3:29 PM
5	Third grade does not have the skills or maturity to handle this strand successfully.	11/30/2015 2:54 PM
6	3rd: which ecosystems should be covered? what adaptations should be taught?	11/30/2015 2:46 PM
7	Which ecosystems should be covered? What adaptations should be taught?	11/30/2015 2:14 PM
8	Which ecosystem should be convered? What adaptations should be taught?	11/30/2015 2:04 PM
9	Use the NGSS.	11/13/2015 11:03 AM
10	Any time evolution is mentioned it should be said that it is a "THEORY".	11/10/2015 1:59 PM
11	I'd like to the study of evolution and fossils in fourth grade with the study of the earth.	11/5/2015 12:22 PM
12	Standards are too vague to understand. Examples are needed.	11/2/2015 5:41 PM

Biological Evolution:
Unity and Diversity (LS4)

Q68 The standards set a rigorous path of high expectations for students at each grade level.

Answered: 32 Skipped: 228



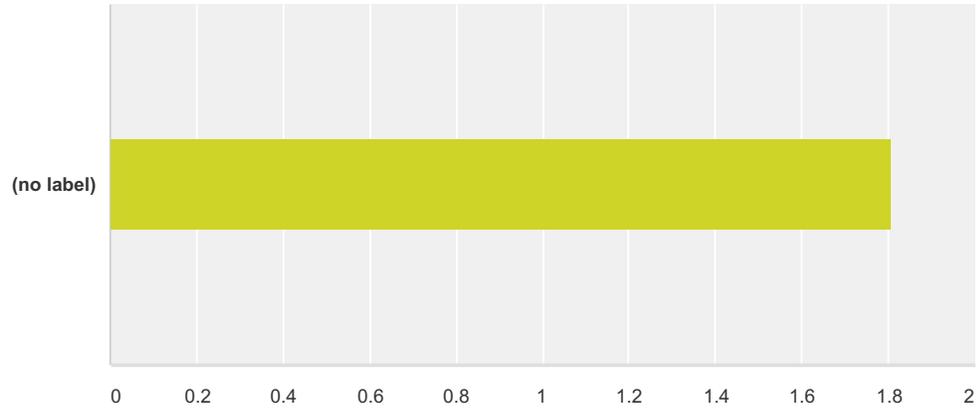
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	56.25% 18	25.00% 8	9.38% 3	9.38% 3	32	1.72

#	Suggested revisions for standards:	Date
1	follow nex gen science standards	12/2/2015 7:56 AM
2	Grade 2: LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats. Grade 3: LS4-1 Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. This is important as in ESS Grade 4, students are expected to look at fossil records to make claims as to how the earth has changed over time, but they would not have had any fossil study - 4th grade teachers will have to teach this above standard to support the fossil record to date earth.	11/30/2015 10:56 PM
3	Biodiversity and Humans- which environmental changes should be covered?	11/30/2015 3:29 PM
4	Too rigorous for third grade.	11/30/2015 2:54 PM
5	3rd - What environmental changes should be taught?	11/30/2015 2:46 PM
6	Biodiversity and humans- Which environmental changes should be covered?	11/30/2015 2:04 PM
7	Overly rigorous for third grade	11/30/2015 10:32 AM
8	Use the NGSS.	11/13/2015 11:03 AM
9	Any time evolution is mentioned it should be said that it is a "THEORY".	11/10/2015 1:59 PM

Biological Evolution:
Unity and Diversity
(LS4)

Q69 The majority of the standards in this strand can be assessed in the classroom and/or on a state assessment.

Answered: 31 Skipped: 229



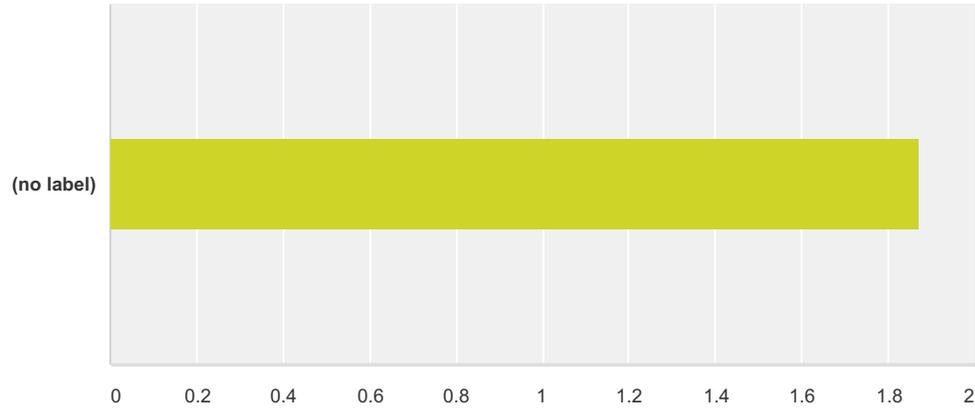
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	54.84% 17	22.58% 7	9.68% 3	12.90% 4	31	1.81

#	Suggested revisions for standards:	Date
1	follow nex gen science standards	12/2/2015 7:56 AM
2	We are not ready to assess this strand at the third grade level due to lack of time to teach such an in depth subject.	11/30/2015 2:54 PM
3	Use the NGSS.	11/13/2015 11:03 AM
4	Any time evolution is mentioned it should be said that it is a "THEORY".	11/10/2015 1:59 PM

Biological Evolution: Unity and Diversity (LS4)

Q70 The standards in this strand are understandable to educators and explainable to parents and other stakeholders.

Answered: 31 Skipped: 229



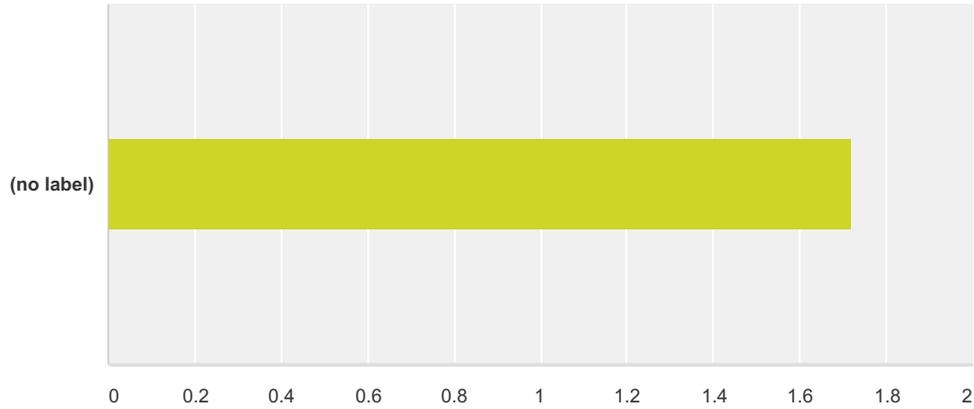
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	51.61% 16	22.58% 7	12.90% 4	12.90% 4	31	1.87

#	Suggested revisions for standards:	Date
1	follow nex gen science standards	12/2/2015 7:56 AM
2	They are understandable to educators but not to students and some of their parents.	11/30/2015 2:54 PM
3	Use the NGSS.	11/13/2015 11:03 AM
4	Any time evolution is mentioned it should be said that it is a "THEORY".	11/10/2015 1:59 PM
5	Talking about mating animals is inappropriate for 3rd graders. This should be moved up to 5th grade or higher.	11/2/2015 5:41 PM
6	Take out Mating	11/2/2015 5:28 PM
7	Be more specific.	11/2/2015 5:25 PM

Biological Evolution:
Unity and Diversity
(LS4)

Q71 The standards in this strand represent the necessary content for a student to reach college and/or career readiness upon graduation.

Answered: 29 Skipped: 231



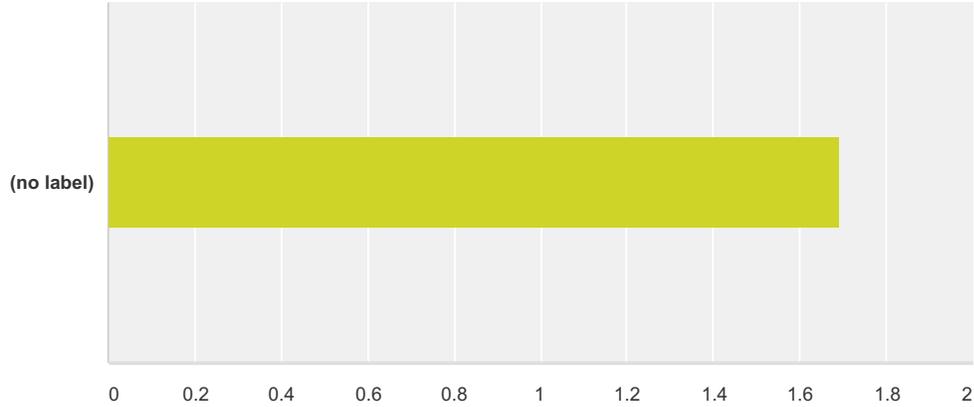
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	55.17% 16	24.14% 7	13.79% 4	6.90% 2	29	1.72

#	Suggested revisions for standards:	Date
1	follow nex gen science standards	12/2/2015 7:56 AM
2	Eventually yes, but just not at this grade level.	11/30/2015 2:54 PM
3	Again, remove the section on Natural Selection and Biodiversity and Humans from third and place in a higher grade level.	11/30/2015 10:32 AM
4	Use the NGSS.	11/13/2015 11:03 AM
5	Any time evolution is mentioned it should be said that it is a "THEORY".	11/10/2015 1:59 PM
6	Evolution is the building block of biology. All science classes in college expect a basic understanding of the concept. A clear understanding of what evolution actually is, not what it is portrayed to be by those that don't understand it, will prepare students for college and their careers.	11/5/2015 12:22 PM

Biological Evolution:
Unity and Diversity
(LS4)

Q72 The standards in this strand are accurate and encompass the breadth of the content.

Answered: 29 Skipped: 231



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	55.17% 16	27.59% 8	10.34% 3	6.90% 2	29	1.69

#	Suggested revisions for standards:	Date
1	follow nex gen science standards	12/2/2015 7:56 AM
2	Add: Grade 2: LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats. Grade 3: LS4-1 Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. This is important as in ESS Grade 4, students are expected to look at fossil records to make claims as to how the earth has changed over time, but they would not have had any fossil study - 4th grade teachers will have to teach this above standard to support the fossil record to date earth.	11/30/2015 10:56 PM
3	It is too much for third grade to handle maturation wise.	11/30/2015 2:54 PM
4	Use the NGSS.	11/13/2015 11:03 AM
5	Any time evolution is mentioned it should be said that it is a "THEORY".	11/10/2015 1:59 PM

Biological Evolution:
Unity and Diversity
(LS4)

**Q73 Overall comments regarding the
proposed standards for Biological
Evolution: Unity and Diversity (LS4):**

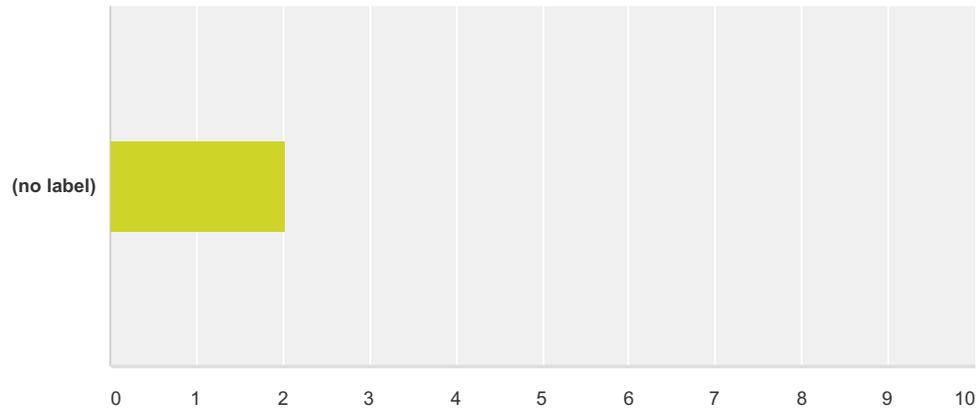
Answered: 13 Skipped: 247

#	Responses	Date
1	3rd Grade - LS4B (Natural Selection) * Interesting.....this is getting pretty specific for third grade. It may be a little too difficult. 3rd Grade - LS4D (Biodiversity and Humans) * This is difficult to understand. The current standard is much easier to read.	12/2/2015 8:07 PM
2	follow nex gen science standards	12/2/2015 7:56 AM
3	LS4.A Evidence of Common Ancestry and Diversity None evident in K-5 - needs to be addressed LS4.B Natural Selection 3rd Grade only LS4.C Adaptation 3rd Grade only LS4.D Biodiversity and Humans 3rd Grade Only	11/30/2015 10:56 PM
4	I believe that the current standard 4.1.A.1.a should be kept as a proposed standard.	11/30/2015 9:26 AM
5	I believe that the current standard 4.1.A.1.a should still be kept as a proposed standard.	11/30/2015 9:26 AM
6	I believe the current standard 4.1.A.1.a. should still be kept as a proposed standard.	11/30/2015 9:26 AM
7	4th grade standard wording is confusing	11/29/2015 8:55 PM
8	LS4B - 4th grade - Not age appropriate, not sure what it means	11/29/2015 8:37 PM
9	Overall, the science standards have been extremely pushed down. Many standards have been added to each grade level, but nothing has been taken off. We need to prioritize the standards and give teachers an amount of standards that they can teach well with the time they are given. The science standard are very wordy and technically written. Writing them in student-friendly language would help curriculum writers, teachers and students alike.	11/24/2015 12:42 PM
10	Let's use the Next Generation Science Standards. This is ridiculous that we spend so much time and money on trying to figure out what standards to teach our kids when the Next Generation Science Standards are already written and easy to follow. Quit trying to reinvent the wheel.	11/13/2015 11:03 AM
11	Any time evolution is mentioned it should be said that it is a "THEORY".	11/10/2015 1:59 PM
12	I agree with including biological evolution in the Missouri Learning Standards.	11/5/2015 12:22 PM
13	How in depth are we to teach when it comes to systems of the body - naming organs and functions of each? Just identifying how the system as a whole works? How the stomach works in a cow versus a human? Lots of room for interpretation here.	10/26/2015 3:26 PM

Q75 The standards in this strand are developmentally appropriate.

Earth's Place in the Universe
(ESS1)

Answered: 52 Skipped: 208



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	42.31% 22	26.92% 14	17.31% 9	13.46% 7	52	2.02

#	Suggested revisions for standards:	Date
1	Standards are not age appropriate. The standards are about 2 years above students in 5th Grade.	12/2/2015 2:44 PM
2	I would like to see the Solar System with planets back in the 3rd Grade Curriculum again. (The students were really interested in learning about the planets. :)	12/2/2015 2:41 PM
3	Kindergarten needs to be more involved of learning about overall space. Not just sun, moon, and stars. They need to discuss the planets, especially earth.	12/1/2015 12:17 PM
4	Too narrow; too easy Fifth graders want to learn more that what is being assessed.	11/30/2015 3:03 PM
5	Too narrow and too easy. 5th graders want to learn more than what these standards entail.	11/30/2015 3:03 PM
6	Too narrow and too easy - 5th graders want to learn more than what these students entail.	11/30/2015 3:03 PM
7	ESS1A is the same in Kindergarten and Grade 1 = This should be a responsibility of grade 1. ESS1B Grade 3 "Explain how the Sun's position in the sky and the Earth's rotation affect the length and direction of shadows" This is too abstract for 8 year old children to understand. should be in 5th grade. There has been no study of light at all in the current MLS recommendations.	11/30/2015 12:54 PM
8	This document is disorganized and very difficult to read. The effort to blend the GLEs with the Science Frameworks is just a mess. There is no evidence of consideration of research that informs progressions.	11/20/2015 1:52 PM
9	Ess1-B Earth and the Solar System This material is more geared for 6th grade.	11/13/2015 1:47 PM
10	ESS1-B This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:34 PM
11	Many of the standards need to be understood at a basic level before a student can extrapolate a new idea.	11/13/2015 1:34 PM
12	Use the NGSS.	11/13/2015 11:05 AM
13	This is an abstract thinking skill.	11/13/2015 10:15 AM
14	The proposed standard for Kindergarten is very vague and need clarification. What does "over time" mean? I would assume seasons but since the standards stating seasons were removed, I am not sure what "time" is being referenced.	11/2/2015 5:36 PM

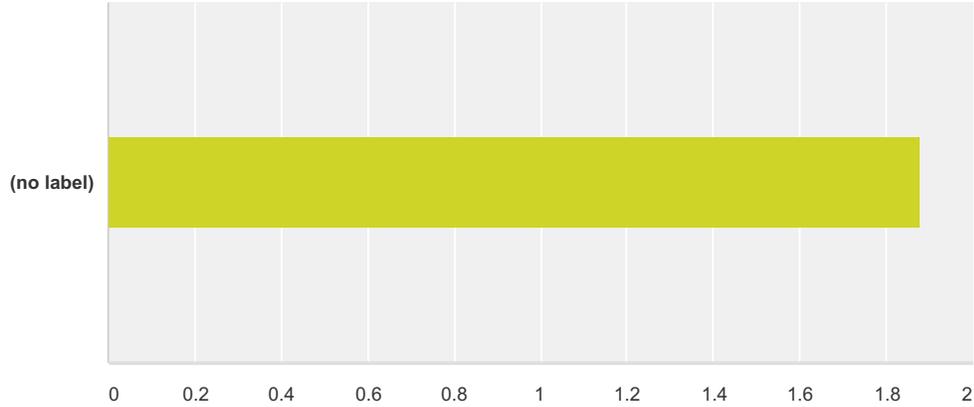
HB1490 Work Group - Science K-5

15	Need clarification at all levels, but especially at the kindergarten level. Much too broad in its current form to be useful.	11/2/2015 5:36 PM
16	There are too many years focusing on shadows. They should replace some of the shadows standards with moon phases	11/2/2015 5:09 PM
17	This strand seems to focus a lot on shadows. The Moon phases are needed to be taught as well.	11/2/2015 5:05 PM

Earth's Place in the Universe (ESS1)

Q76 The standards in this strand follow a coherent path through and across all grade levels.

Answered: 49 Skipped: 211



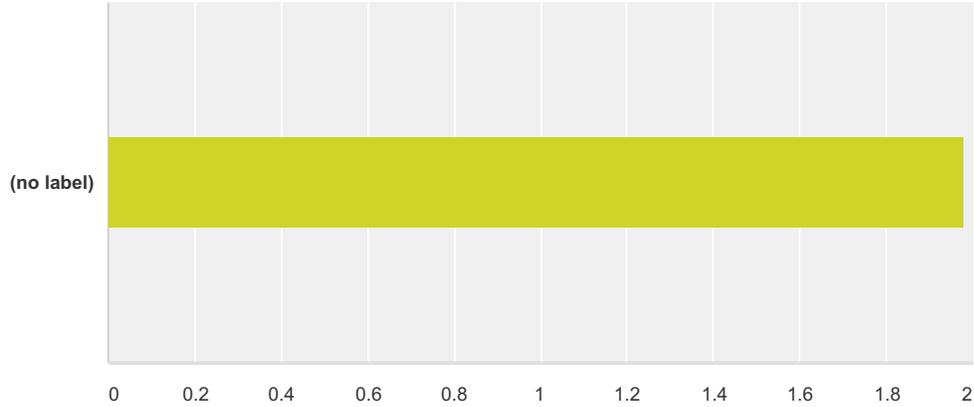
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	44.90% 22	32.65% 16	12.24% 6	10.20% 5	49	1.88

#	Suggested revisions for standards:	Date
1	3rd Grade standards seem to be age appropriate for 5th Grade.	12/2/2015 2:44 PM
2	More depth and substance needed.	11/30/2015 3:03 PM
3	ESS1A Universe and Its Stars Grades 1 and 5 ESS1B Earth and the Solar System: Grade 1 should include Make observations at different times of the year to relate the amount of daylight to the time of year. Grade 3 In reference to the grade 3 ESS1B standard, based on all proposed standards in K-3 there has been NO study of light at all, so jumping to shadows is illogical. This standard should move to grade 5 as it is developmentally not appropriate in grade 3. ESS1C History of Planet Earth: The standards for grades 2 and 4 are well written, coherent and rigorous.	11/30/2015 12:54 PM
4	ESS1-B This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:34 PM
5	Use the NGSS.	11/13/2015 11:05 AM
6	Need clarification and more specifics	11/2/2015 5:36 PM
7	The third grade standards are very vague. Teachers will not know that they need to teach tools to measure weather, the different types of weather, how weather is measured.	11/2/2015 5:09 PM

Earth's Place in the Universe (ESS1)

Q77 The standards set a rigorous path of high expectations for students at each grade level.

Answered: 50 Skipped: 210



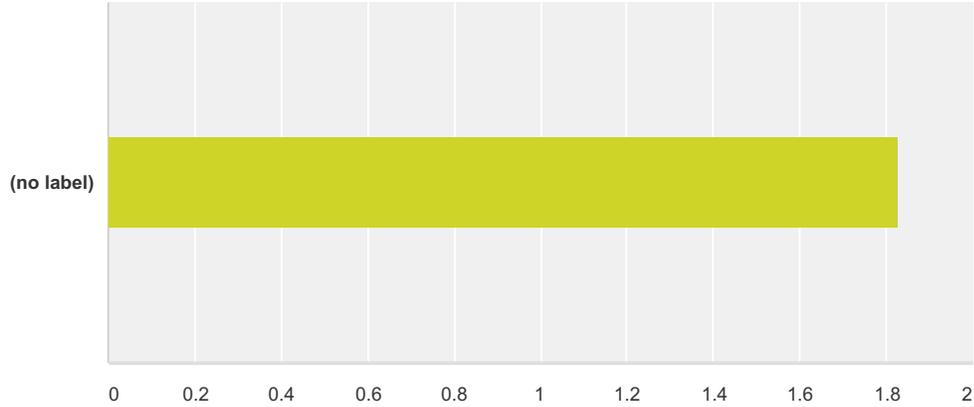
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	44.00% 22	30.00% 15	10.00% 5	16.00% 8	50	1.98

#	Suggested revisions for standards:	Date
1	Not rigorous	11/30/2015 3:03 PM
2	Too narrow and too easy. 5th graders want to learn more than what these standards entail.	11/30/2015 3:03 PM
3	For 5th graders, these standards are not rigorous.	11/30/2015 3:03 PM
4	There is not a rigorous path when there is only one standard in K, and 1 and it is the same standard. Grade 1 if they keep 1-ESS1-1 on learning about patterns, should also be expected to add a 1-ESS1-2 Make observations at different times of year to relate that amount of daylight to the time of the year. It is also a study of patterns, which is important. Grade 3 ESS1B should move to Grade 5 to join with 5-ESS1-2 making it a deeper and rigorous expectation. 4-ESS1-1 is a good standard, "Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time." HOWEVER, when 3-LS4-1 is not included in grade 3 and students do not even learn what fossils are and where they come from, how can they construct meaning on how the earth changes. Grades 2 and 4 are well written and are rigorous	11/30/2015 12:54 PM
5	ESS1-B This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:34 PM
6	Use the NGSS.	11/13/2015 11:05 AM
7	Rigor is too difficult to determine with the vagueness of the standards in their current form.	11/2/2015 5:36 PM
8	The fact that shadows are taught across more than one grade level is unnecessary. I think they need to focus on moon phases in one of the grades.	11/2/2015 5:09 PM
9	A lot of gaps. Does not flow well from one grade to another.	11/2/2015 5:05 PM

Earth's Place in the Universe (ESS1)

Q78 The majority of the standards in this strand can be assessed in the classroom and/or on a state assessment.

Answered: 52 Skipped: 208



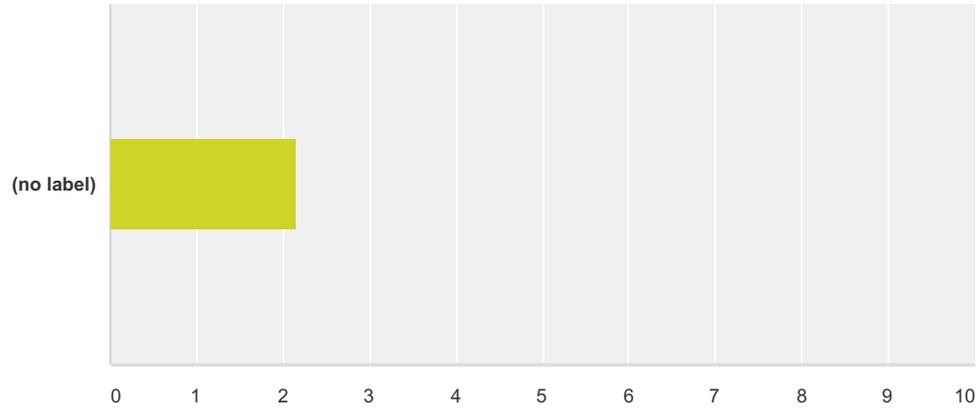
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	46.15% 24	32.69% 17	13.46% 7	7.69% 4	52	1.83

#	Suggested revisions for standards:	Date
1	Graphing is difficult for 10 year olds, it is an abstract concept that is fairly new to them. Throwing them into massive graphing and analytical problems is a sure way to frustrate students. Beginning with hands-on, tangible data for graphing and then easing into the depth of graphing describing in these standards will work a lot better.	12/2/2015 2:44 PM
2	More depth and substance needed for assessments.	11/30/2015 3:03 PM
3	By the end of 5th grade, students would have a fairly comprehensive study of Earth's Place in the Universe with the following changes. K-ESS1-1 eliminate Add 1-ESS1-2 Make observations at different times of year to relate that amount of daylight to the time of the year. 3-ESS1-B Move to grade 5	11/30/2015 12:54 PM
4	The choices above do not connect to the question above.	11/20/2015 1:52 PM
5	Standards are too broad.	11/16/2015 2:49 PM
6	ESS1-B This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:34 PM
7	Use the NGSS.	11/13/2015 11:05 AM
8	Standard must be outlined and defined by level.	11/2/2015 5:36 PM

Earth's Place in the Universe (ESS1)

Q79 The standards in this strand are understandable to educators and explainable to parents and other stakeholders.

Answered: 49 Skipped: 211



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	40.82% 20	14.29% 7	34.69% 17	10.20% 5	49	2.14

#	Suggested revisions for standards:	Date
1	I had to re-read the standards several time to ensure I was grasping the whole meaning. I am working on a masters in Physics. The vocabulary is very high.	12/2/2015 2:44 PM
2	more depth and substance needed	11/30/2015 3:03 PM
3	Need more depth and breadth	11/30/2015 3:03 PM
4	Standards are not comprehensive enough.	11/30/2015 3:03 PM
5	There is not a rigorous path when there is only one standard in K, and 1 and it is the same standard. Grade 1 if they keep 1-ESS1-1 on learning about patterns, should also be expected to add a 1-ESS1-2 Make observations at different times of year to relate that amount of daylight to the time of the year. It is also a study of patterns, which is important. Grade 3 ESS1B should move to Grade 5 to join with 5-ESS1-2 making it a deeper and rigorous expectation. 4-ESS1-1 is a good standard, "Identify evidence from patterns in rock formations and fossils in rock layers to support tan explanation for changes in a landscape over time." HOWEVER, when 3-LS4-1 is not included in grade 3 and students do not even learn what fossils are and where they come from, how can they construct meaning on how the earth changes. Grades 2 and 4 are well written and are rigorous	11/30/2015 12:54 PM
6	The way the current standard 5.2.A.2.a is written for standard ESS1-C breaks down the specific skills needed to be taught and is worded better to understand.	11/13/2015 1:46 PM
7	The wording of the current standard as opposed to the proposed standard is more specific and understandable.	11/13/2015 1:45 PM
8	Keep as current standard wording is more workable. Ess1-c.	11/13/2015 1:44 PM
9	ESS1-C The History of the Planet The wording of the current standard as to the propose standard is more understanding.	11/13/2015 1:44 PM
10	ESS1-C The wording of the current standard as opposed to the proposed standard is more specific and understandable.	11/13/2015 1:44 PM
11	The wording of the current standard, as opposed to the current standard, is more specific and understandable.	11/13/2015 1:42 PM

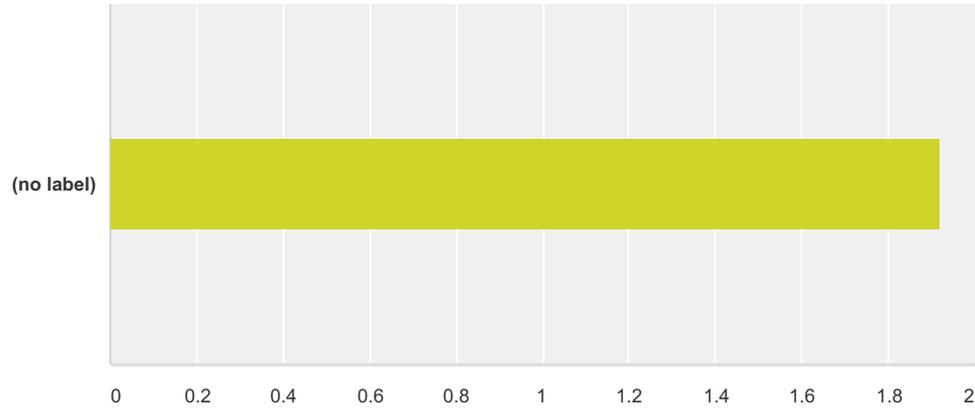
HB1490 Work Group - Science K-5

12	ESS1-B This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:34 PM
13	Use the NGSS.	11/13/2015 11:05 AM
14	The Kindergarten wording is very unclear. I would not know what I was expected to teach or assess.	11/2/2015 5:36 PM
15	Needs Clarification	11/2/2015 5:36 PM
16	Wording is not detailed enough for teachers and students to be uniform across the state as far as the expectation to be taught.	11/2/2015 5:09 PM
17	The standards are very vague and difficult to see what needs to be assessed. They would be much more user friendly if they were more specific and listed the points that need to be covered. There is so much covered by each standard that it would be easy to miss something they way they are currently written.	11/2/2015 5:08 PM
18	The proposed standards are extremely vague. It is easier to measure student performance when standards are more specific. If they stay written in the way they are, there should at least be a bulleted list included with each standard which details what students are expected (ESS2D Weather and Climate is an example that would be very difficult to determine what should be taught).	11/2/2015 5:07 PM
19	These need to be more explanatory.	11/2/2015 5:05 PM

Earth's Place in the Universe (ESS1)

Q80 The standards in this strand represent the necessary content for a student to reach college and/or career readiness upon graduation.

Answered: 50 Skipped: 210

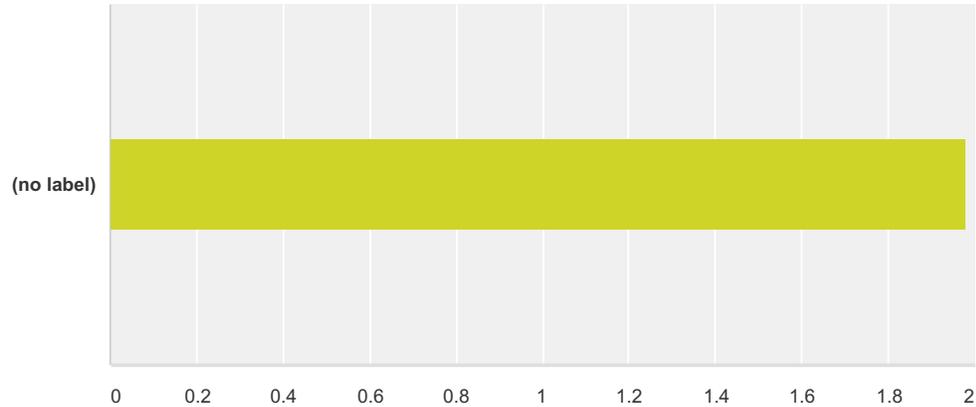


	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	44.00% 22	32.00% 16	12.00% 6	12.00% 6	50	1.92

#	Suggested revisions for standards:	Date
1	I feel if we push these concepts at such a young age, students will get frustrated and quit learning. These standards are great and I believe they are challenging and could prepare students for college, if they are given at a higher grade level. These are not age appropriate.	12/2/2015 2:44 PM
2	Not enough depth or substance to reach college/career readiness	11/30/2015 3:03 PM
3	ESS1-B This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:34 PM
4	Use the NGSS.	11/13/2015 11:05 AM
5	There could be a variety of explanations and answers.	11/13/2015 10:15 AM
6	Needs clarification	11/2/2015 5:36 PM
7	Although this is hard to determine without seeing all standards through to grade 12, they seem pretty basic.	11/2/2015 5:07 PM
8	I feel like there are some important topics being taken out.	11/2/2015 5:05 PM

Q81 The standards in this strand are accurate and encompass the breadth of the content.

Answered: 51 Skipped: 209



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	45.10% 23	29.41% 15	7.84% 4	17.65% 9	51	1.98

#	Suggested revisions for standards:	Date
1	I feel like the breadth is too narrow; bring back the planets	11/30/2015 3:03 PM
2	Need more depth and substance	11/30/2015 3:03 PM
3	Not enough depth.	11/30/2015 3:03 PM
4	The standards are too narrow	11/30/2015 3:01 PM
5	There is not a rigorous path when there is only one standard in K, and 1 and it is the same standard. Grade 1 if they keep 1-ESS1-1 on learning about patterns, should also be expected to add a 1-ESS1-2 Make observations at different times of year to relate that amount of daylight to the time of the year. It is also a study of patterns, which is important. Grade 3 ESS1B should move to Grade 5 to join with 5-ESS1-2 making it a deeper and rigorous expectation. 4-ESS1-1 is a good standard, "Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time." HOWEVER, when 3-LS4-1 is not included in grade 3 and students do not even learn what fossils are and where they come from, how can they construct meaning on how the earth changes. Grades 2 and 4 are well written and are rigorous	11/30/2015 12:54 PM
6	The GLEs are "disguised" as the Supporting Standard. This is NOT an improvement. The GLE's are mainly focused on memorizing facts rather than developing conceptual understanding through participation in science processes.	11/20/2015 1:52 PM
7	ESS1-B This standard is too advanced. The basic concept needs to be taught before this.	11/13/2015 1:34 PM
8	Use the NGSS.	11/13/2015 11:05 AM
9	Much too broad, need clarification	11/2/2015 5:36 PM
10	Moon phases is missing	11/2/2015 5:09 PM
11	It looks like a lot of content regarding the moon has been removed. Does that encompass the breadth of the content?	11/2/2015 5:07 PM

Earth's Place in the Universe (ESS1)

Q82 Overall comments regarding the proposed standards for Earth's Place in the Universe (ESS1):

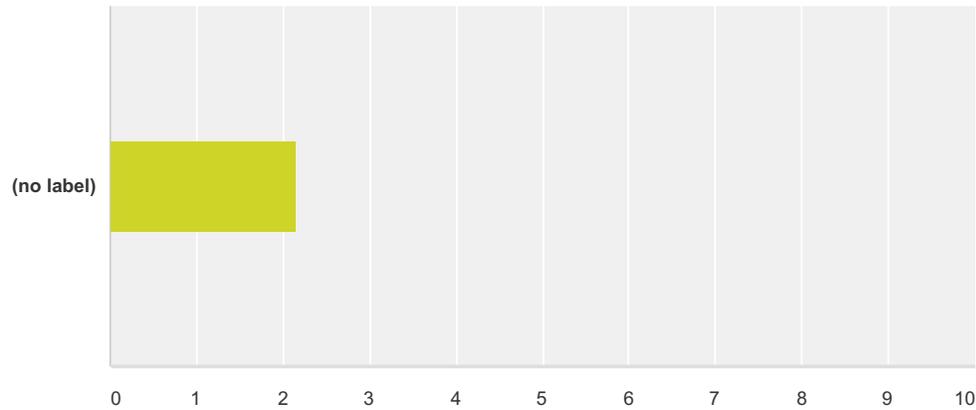
Answered: 12 Skipped: 248

#	Responses	Date
1	ESS1A (Describe the presence of the Sun, Moon, and stars in the sky over time) Good standard! Glad to see this included Overall the wording in the proposed standards is easier to understand.	12/2/2015 7:56 PM
2	Students are fascinated by the Universe, but the concepts require such a high vocabulary and previous knowledge that they are soon lost. Standards need to be not as high and brought down to the appropriate grade level.	12/2/2015 2:44 PM
3	ESS1A in fifth grade appears to be incomplete.	12/1/2015 11:30 PM
4	These are not comprehensive enough for the interest level of 5th graders	11/30/2015 3:03 PM
5	3rd grade - The proposed standard is very general, however, the current standards are more detailed and explain how to get to the proposed standards. Details can be helpful especially for young teachers.	11/30/2015 2:33 PM
6	There is not a rigorous path when there is only one standard in K, and 1 and it is the same standard. Grade 1 if they keep 1-ESS1-1 on learning about patterns, should also be expected to add a 1-ESS1-2 Make observations at different times of year to relate that amount of daylight to the time of the year. It is also a study of patterns, which is important. Grade 3 ESS1B should move to Grade 5 to join with 5-ESS1-2 making it a deeper and rigorous expectation. 4-ESS1-1 is a good standard, "Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time." HOWEVER, when 3-LS4-1 is not included in grade 3 and students do not even learn what fossils are and where they come from, how can they construct meaning on how the earth changes. Grades 2 and 4 are well written and are rigorous	11/30/2015 12:54 PM
7	Overall, the science standards have been extremely pushed down. Many standards have been added to each grade level, but nothing has been taken off. We need to prioritize the standards and give teachers an amount of standards that they can teach well with the time they are given. The science standard are very wordy and technically written. Writing them in student-friendly language would help curriculum writers, teachers and students alike.	11/24/2015 12:43 PM
8	These standards do not include the Science and Engineering practices or the Cross Cutting Concepts as outlined in the Science Frameworks. The format does not flow with the secondary standards. There are no clarifying statements or assessment recommendations. One cannot really "unpack" the standard. Having two documents, one is portrait and one is landscape. How do they fit together. This document is very poorly organized. The standards for The Universe are the same as the current GLEs and have the same information in K and Grade 1. Repeating the pattern of the GLEs is not an improvement.	11/20/2015 1:52 PM
9	Representing data in graphical displays seems a little much for 5th grade students.	11/13/2015 1:47 PM
10	I like the wording of the current standards as opposed the proposed standards. The current standards are more specific.	11/13/2015 1:45 PM
11	Let's use the Next Generation Science Standards. This is ridiculous that we spend so much time and money on trying to figure out what standards to teach our kids when the Next Generation Science Standards are already written and easy to follow. Quit trying to reinvent the wheel.	11/13/2015 11:05 AM
12	I like this addition to the science standards. I feel it is important that students know about the Earth and the Universe.	11/4/2015 11:24 AM

Earth's Systems (ESS2)

Q84 The standards in this strand are developmentally appropriate.

Answered: 49 Skipped: 211



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	34.69% 17	30.61% 15	20.41% 10	14.29% 7	49	2.14

#	Suggested revisions for standards:	Date
1	ESS2E at Kindergarten seems to be difficult for Kindergarten students.	12/2/2015 9:39 AM
2	ESS2 E. Biology- At the kindergarten level, should be discussing living and non-living and habitats. Students at this level can not construct an argument using evidence. They can draw or verbally tell you why or how.	12/1/2015 12:28 PM
3	There is not enough depth or substance in general.	11/30/2015 3:07 PM
4	basically too narrow, not enough depth to them	11/30/2015 3:06 PM
5	Not enough depth and substance for 5th graders.	11/30/2015 3:06 PM
6	5th graders want to learn more than this standard encompasses	11/30/2015 3:01 PM
7	The standard: ESS2E is rather deep for kindergarten.	11/29/2015 7:45 PM
8	I am a kindergarten educator in Missouri. I do not feel the common core standards need to be changed. They are developmentally appropriate for this grade level.	11/20/2015 3:30 PM
9	ESS2E seems to be requiring a more higher level of thinking when asking how plants can change their environments to meet their needs. It would be more appropriate to only discuss how humans and animals change the environment to meet their needs.	11/16/2015 2:25 PM
10	ESS2E This is a biology standard that suggests kindergarten student need to understand that plants, animals, and humans can change their environment. I believe that humans and animals changing their environment is a concept kindergarteners can comprehend. However, plants making changes to their environment is not developmentally appropriate. Also, I do not see how this standard builds upon learning in the students future grades.	11/16/2015 2:19 PM
11	Please be more specific when stating "Develop a model" what exactly is the expectation of the model? I also would suggest that ESS2-C be written as "bodies of water" instead of reservoirs.	11/15/2015 9:20 PM
12	ESS2-A Earth Materials and Systems Developing a model- this seems a little to difficult. We just discuss and read in class. Ess2-Roles of Water in Earth's Surface Processes This is too broad of a skill to teach the students. Also, is this fresh or salt water? Do they still need to know both?	11/13/2015 1:50 PM
13	On ESS2-B I prefer the current the standard that states students will identify instead of develop a model.	11/13/2015 1:49 PM

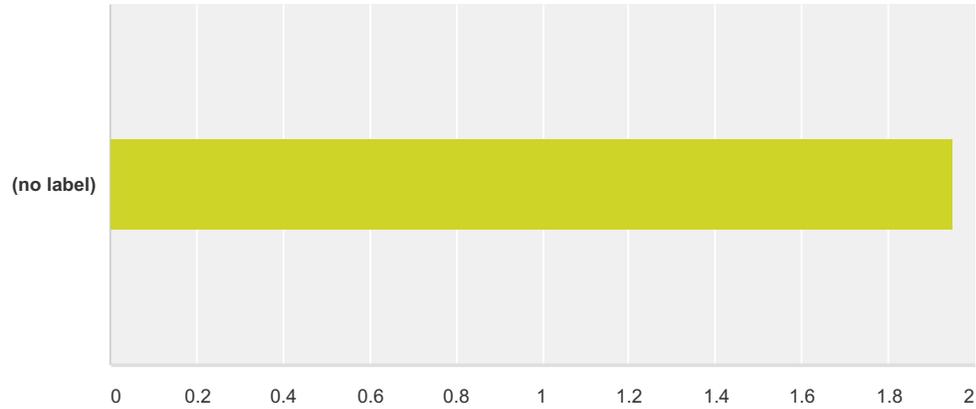
HB1490 Work Group - Science K-5

14	Let's use the Next Generation Science Standards. They are more clearly written.	11/13/2015 10:55 AM
15	First graders can do more than the one standard listed. The MLS includes 5 Weather/Climate standards that are all appropriate.	11/11/2015 2:19 PM
16	Expecting a kindergarten student to construct an argument (even with prompting and support) is not developmentally appropriate.	11/9/2015 3:13 PM
17	The Strand ESS2A is an incomplete question. This needs to be revised.	11/4/2015 12:21 PM
18	There is not enough background built before 3rd grade on weather.	11/2/2015 5:13 PM

Earth's Systems (ESS2)

Q85 The standards in this strand follow a coherent path through and across all grade levels.

Answered: 44 Skipped: 216

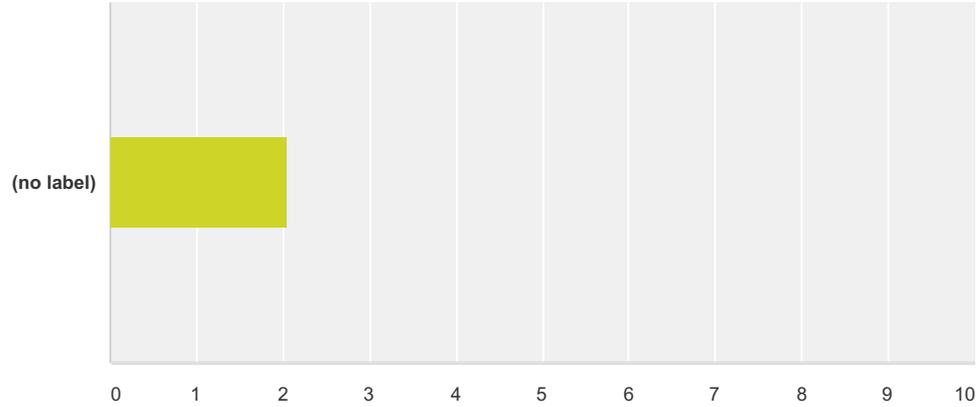


	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	45.45% 20	29.55% 13	9.09% 4	15.91% 7	44	1.95

#	Suggested revisions for standards:	Date
1	ESS2.A Earth Materials and Systems Grades 2 and 4 are coherent ESS2.B Plate Tectonics and Large-Scale System Interactions Grades 2 and 4 are coherent ESS2.C The Roles of Water in the Earth's Surface Processes Grade 2 and 5 are coherent ESS2.D Weather and Climate Grades K, 1, 3 Although Weather should not be in successive grades. ESS2.E Biogeology = please change the title from Biology = terms are different. Kindergarten only which is a concern. How plants and animals impact the surface of the earth needs to be addressed in older grades. 4-ESS2-1 is an option for grade 4 to include.	11/30/2015 8:20 PM
2	I am a kindergarten educator in Missouri. I do not feel the common core standards need to be changed. They follow a coherent path through all grade levels.	11/20/2015 3:30 PM
3	There also seems to be a disconnect as to where this standard continues on in future grades.	11/16/2015 2:25 PM
4	Does not mention this standard in any other grade level.	11/16/2015 2:19 PM
5	These standards need to have specific vocabulary terms and definitions to be taught for each grade.	11/15/2015 9:20 PM
6	Let's use the Next Generation Science Standards.	11/13/2015 10:55 AM
7	It would be more appropriate to identify changes plants and animals undergo prior to constructing an argument. We need to build the underlining knowledge prior to being able to form an argument.	11/9/2015 3:13 PM
8	This should be built throughout the grade.	11/2/2015 5:13 PM
9	There needs to be more of a background knowledge for weather in other grades in order for students to graph and make predictions in weather in third grade.	11/2/2015 5:09 PM

Q86 The standards set a rigorous path of high expectations for students at each grade level.

Answered: 48 Skipped: 212



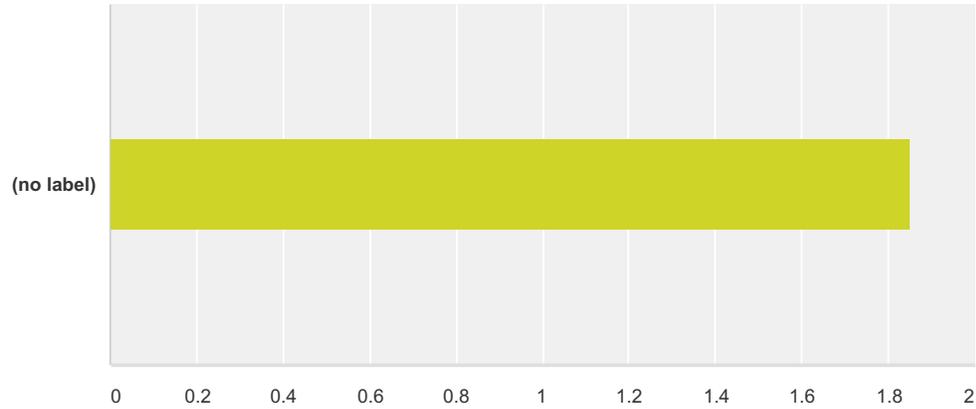
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	39.58% 19	35.42% 17	6.25% 3	18.75% 9	48	2.04

#	Suggested revisions for standards:	Date
1	ESS2E at Kindergarten seems too difficult for Kindergarten students and I don't see that addressing this standard is necessary to future standards.	12/2/2015 9:39 AM
2	To maintain rigor, attention should be made toward including the following: Grade 4: Add Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation. Grade 4: Modify: Plan and conduct scientific investigations or simulations to determine how natural processes (e.g. weathering and erosion) shape Earth's surfaces. Concern: they can't plan or conduct a simulation. they can run a simulation.	11/30/2015 8:20 PM
3	see above comment	11/30/2015 3:07 PM
4	somewhat too narrow and could encompass more depth of knowledge	11/30/2015 3:06 PM
5	Not enough substance or depth for 5th graders.	11/30/2015 3:06 PM
6	I am a kindergarten educator in Missouri. I do not feel the common core standards need to be changed. They set forth a rigorous path of high expectations for students at each grade level.	11/20/2015 3:30 PM
7	Additional details would be needed to define the standards...they are too broad.	11/16/2015 2:25 PM
8	Use the Next Generation Science Standards.	11/13/2015 10:55 AM
9	Students at this level can do more.	11/11/2015 2:19 PM

Earth's Systems (ESS2)

Q87 The majority of the standards in this strand can be assessed in the classroom and/or on a state assessment.

Answered: 48 Skipped: 212



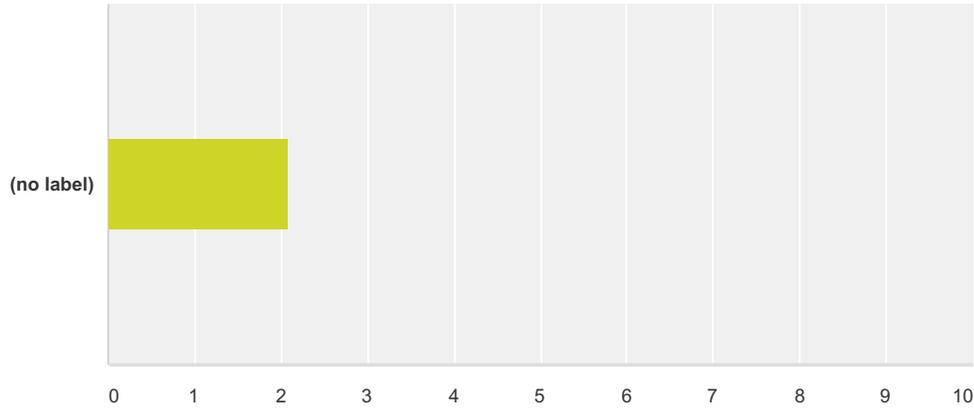
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	45.83% 22	37.50% 18	2.08% 1	14.58% 7	48	1.85

#	Suggested revisions for standards:	Date
1	Not enough depth to be assessed.	11/30/2015 3:06 PM
2	I am a kindergarten educator in Missouri. I do not feel the common core standards need to be changed.	11/20/2015 3:30 PM
3	Clear explanations for "develop a model", "support an argument" are needed. What will this look like on an online assessment? Be specific in the explanations.	11/16/2015 2:30 PM
4	Use the Next Generation Science Standards.	11/13/2015 10:55 AM
5	To assess this could take a considerable amount of time.	11/13/2015 10:17 AM

Earth's Systems (ESS2)

Q88 The standards in this strand are understandable to educators and explainable to parents and other stakeholders.

Answered: 47 Skipped: 213



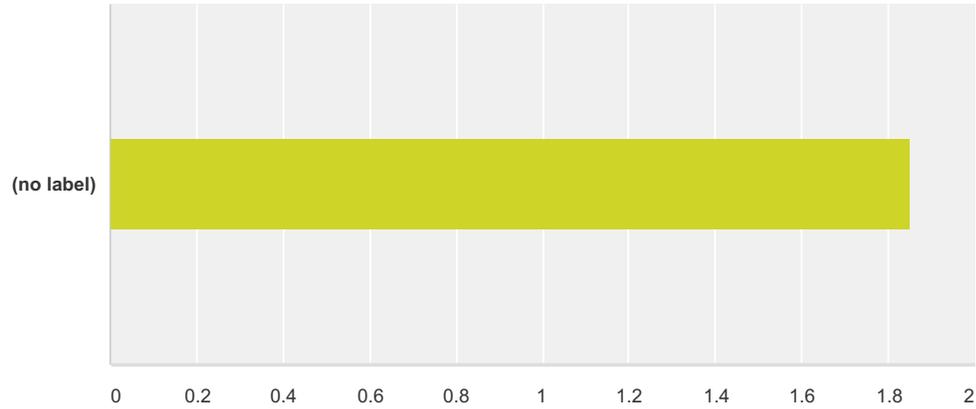
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	36.17% 17	36.17% 17	10.64% 5	17.02% 8	47	2.09

#	Suggested revisions for standards:	Date
1	It is difficult to understand what exactly ESS2E is asking students to do at Kindergarten.	12/2/2015 9:39 AM
2	I'm not sure how I'd explain some of this to parents	11/30/2015 3:06 PM
3	Not comprehensive enough.	11/30/2015 3:06 PM
4	I am a kindergarten educator in Missouri. I do not feel the common core standards need to be changed.	11/20/2015 3:30 PM
5	Part of the Core Ideas text has been omitted in some of the standards. Please review and add the missing phrases (for example, ESS2-A).	11/16/2015 2:30 PM
6	More details would allow for better understanding for parents.	11/16/2015 2:25 PM
7	It would be helpful to have examples of exactly what you mean by "Support and argument" and "Develop a model" for both educators and parents.	11/15/2015 9:20 PM
8	Use the Next Generation Science Standards.	11/13/2015 10:55 AM
9	The standard for 3rd grade is not easily understandable. Teachers would not know by the new standard all that is expected such as tools to measure weather, types of weather, how to measure weather.	11/2/2015 5:13 PM
10	Needs to be more detailed in order to be clearly taught.	11/2/2015 5:09 PM

Earth's Systems (ESS2)

Q89 The standards in this strand represent the necessary content for a student to reach college and/or career readiness upon graduation.

Answered: 46 Skipped: 214



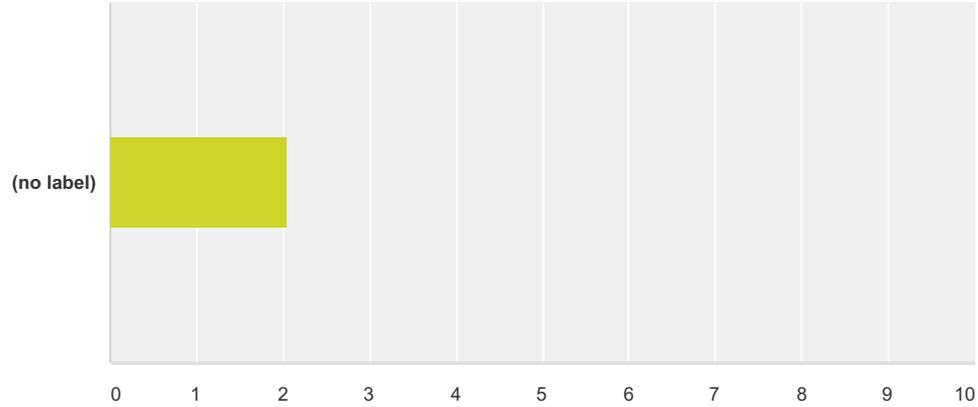
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	45.65% 21	39.13% 18	0.00% 0	15.22% 7	46	1.85

#	Suggested revisions for standards:	Date
1	Not enough depth or substance.	11/30/2015 3:06 PM
2	I am a kindergarten educator in Missouri. I do not feel the common core standards need to be changed.	11/20/2015 3:30 PM
3	Use the Next Generation Science Standards.	11/13/2015 10:55 AM

Earth's Systems
(ESS2)

Q90 The standards in this strand are accurate and encompass the breadth of the content.

Answered: 49 Skipped: 211



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	40.82% 20	32.65% 16	8.16% 4	18.37% 9	49	2.04

#	Suggested revisions for standards:	Date
1	Based on these recommendations, Kindergarten: Weather and Climate First Grade: No Earth System Study needed - they focus on space systems Second Grade: Processes that Change the Earth Third Grade: Weather and Climate Fourth Grade: Processes the Shape the Earth Fifth Grade: Earth Systems and Space Systems	11/30/2015 8:20 PM
2	The strand seems to general. It needs to be more specific.	11/30/2015 3:24 PM
3	lack of substance	11/30/2015 3:07 PM
4	Needs more depth	11/30/2015 3:06 PM
5	Not enough depth or substance.	11/30/2015 3:06 PM
6	The standards are too narrow	11/30/2015 3:01 PM
7	I am a kindergarten educator in Missouri. I do not feel the common core standards need to be changed.	11/20/2015 3:30 PM
8	Reword standard to be more age appropriate and related to distribution of water on Earth rather than confining to reservoirs.	11/19/2015 11:52 AM
9	Use the Next Generation Science Standards.	11/13/2015 10:55 AM
10	The standard for 3rd grade does not allow enough details for teachers to teach this standard uniformly.	11/2/2015 5:13 PM

**Q91 Overall comments regarding the
Earth's Systems (ESS2) proposed standards for Earth's Systems
(ESS2):**

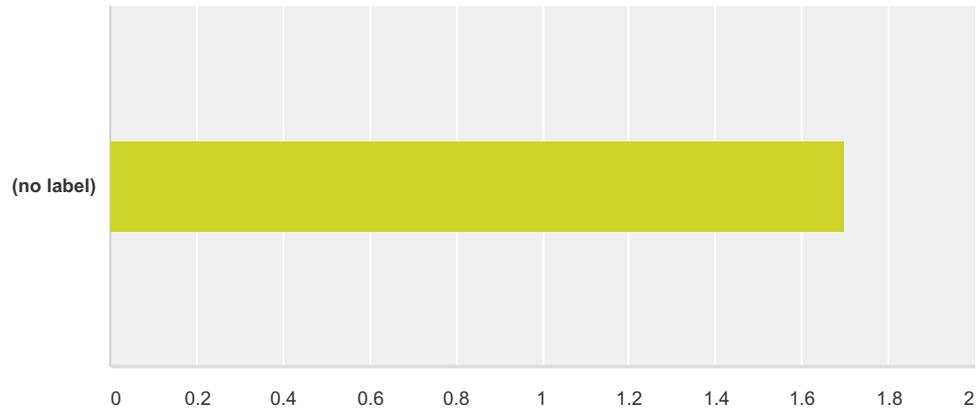
Answered: 15 Skipped: 245

#	Responses	Date
1	ESS2D (Use and share observations of local weather conditions to describe patterns over time) * Great for kids to be able to talk about the weather and be able to look at patterns such as during the summer it is hot and winter it is cold. ESS2E (With prompting and support, construct an argument using evidence for how plants and animals (including but not limited to humans) can change the environment to meet their needs) *I feel this will be hard for Kindergarteners to understand.	12/2/2015 7:57 PM
2	Earth Systems: Very comprehensive in Grade 2 ESS2.A Earth Materials and Systems Grades 2 and 4 ESS2.B Plate Tectonics and Large-Scale System Interactions: Grades 2 and 4 ESS2.C The Roles of Water in the Earth's Surface Processes Grades 2 and 5 ESS2.D Weather and Climate: Weather does not need to be in K and 1. When successive years cover the same topics, then we risk a mile wide and an inch deep with concepts. Kindergarten should study weather. 3rd Grade ESS2.E Biogeology not Biology - Terms are very different. K-ESS2-2 should not begin with the phrase "with prompting and support". This could be in a scoring rubric, but not the standard.	11/30/2015 8:20 PM
3	Standard is too general. Be more specific.	11/30/2015 2:28 PM
4	Standard is too general. Be more specific	11/30/2015 2:08 PM
5	ESS2 - A 5th grade - will students have foundation since 3rd grade does not teach water cycle?	11/29/2015 8:23 PM
6	How would you assess ESS2E for kindergarten students. ESS3C Too much for kindergarten. We need to teach kids how to think not what to think. At this age the need to just understand what makes up the environments. Trying to get them to identify the impacts by humans and communicate solutions is too much weight on their shoulders. That's not how environmental est. works. ESS1-C 5.2.A.2.a poor wording ESS2-A too much for 2nd grade	11/29/2015 8:06 PM
7	Need to have specific weather tools introduced in first grade. 5.2.A.4.b - students need to be able to identify landforms before modeling either in 5th grade or in 4th so they could model in 5th grade. 5.2.F.5.a - seasons have not been mentioned until 3rd grade, seems like it should be much earlier.2- 5.1.c.5A - Will students have the foundation to understand? Need to be able to classify before describing and graphing percentage of H2O 5.s.A.4.e - too vague, are they talking about specific landforms? More specific info on features is needed. ESS3B - 5.3.A.4.b - Strange question, is it worded wrong? ESS	11/29/2015 7:59 PM
8	Overall, the science standards have been extremely pushed down. Many standards have been added to each grade level, but nothing has been taken off. We need to prioritize the standards and give teachers an amount of standards that they can teach well with the time they are given. The science standard are very wordy and technically written. Writing them in student-friendly language would help curriculum writers, teachers and students alike.	11/24/2015 12:43 PM
9	I am a kindergarten educator in Missouri. I do not feel the common core standards need to be changed.	11/20/2015 3:30 PM
10	Let's use the Next Generation Science Standards. This is ridiculous that we spend so much time and money on trying to figure out what standards to teach our kids when the Next Generation Science Standards are already written and easy to follow. Quit trying to reinvent the wheel.	11/13/2015 10:55 AM
11	3-ESS2-2 was left incomplete: Represent data in tables and graphical displays to describe typical weather conditions expected during a Obtain and combine information to describe climates in different regions of the world. 3-ESS2-2	11/12/2015 9:33 PM
12	Add the 4-5 other MLS Standards about Weather and Climate in with the proposed standards. They all go together well in a Weather Unit.	11/11/2015 2:19 PM
13	The proposed standards seem to suggest a summative assessment activity versus what specific content is to be taught. As a relatively new teacher, I appreciate the current specific standards that provide clear direction on content rather than a specific way to assess my students of their comprehension.	11/10/2015 4:33 PM
14	The Kindergarten standards are not clear. What does "over time" mean? Over a year, over a day? Needs clarification.	11/2/2015 5:37 PM
15	No weather standards at all? We spend a great deal of time on weather instruments, using weather data, etc. now and it is simply going to be removed? That doesn't make sense to me.	10/26/2015 2:06 PM

Q93 The standards in this strand are developmentally appropriate.

Earth and Human Activity
(ESS3)

Answered: 23 Skipped: 237



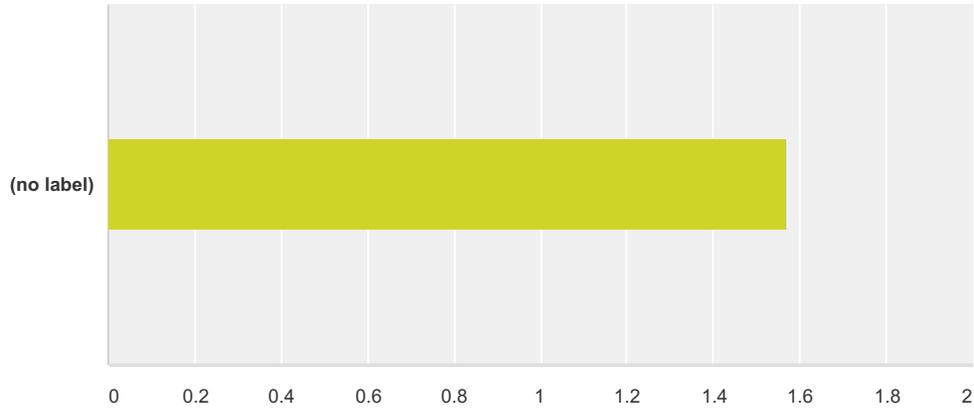
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	60.87% 14	21.74% 5	4.35% 1	13.04% 3	23	1.70

#	Suggested revisions for standards:	Date
1	In Kindergarten, use appropriate language such as recycling or earth day.	12/1/2015 12:27 PM
2	There is not enough depth or substance - too low for 5th graders.	11/30/2015 3:07 PM
3	Communicate solutions that will reduce the impact of humans on the land, water, air and or other living things in the local environment - does not seem developmentally appropriate for kindergarten.	11/29/2015 8:22 PM
4	Use the NGSS.	11/13/2015 11:06 AM

Earth and Human Activity (ESS3)

Q94 The standards in this strand follow a coherent path through and across all grade levels.

Answered: 21 Skipped: 239



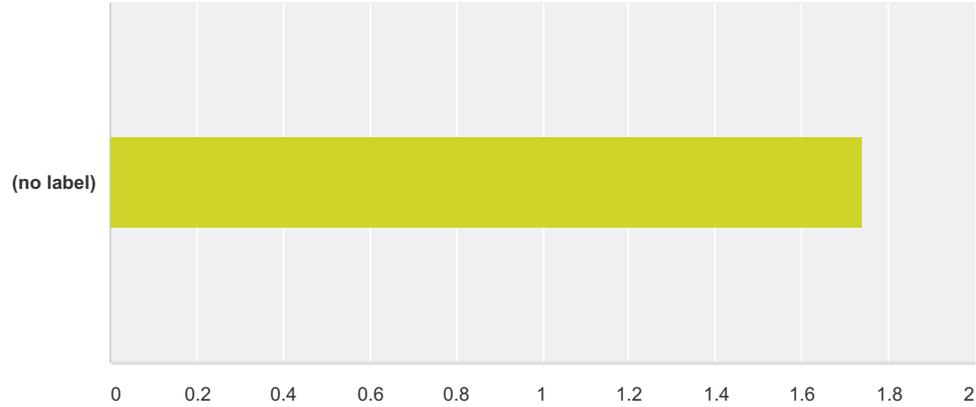
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	61.90% 13	23.81% 5	9.52% 2	4.76% 1	21	1.57

#	Suggested revisions for standards:	Date
1	ESS3.A Natural Resources Add: 4-ESS3-1 Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment. ESS3.B Natural Hazards Add: K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to severe weather.	11/30/2015 8:42 PM
2	Use the NGSS.	11/13/2015 11:06 AM

Earth and Human Activity
(ESS3)

Q95 The standards set a rigorous path of high expectations for students at each grade level.

Answered: 23 Skipped: 237



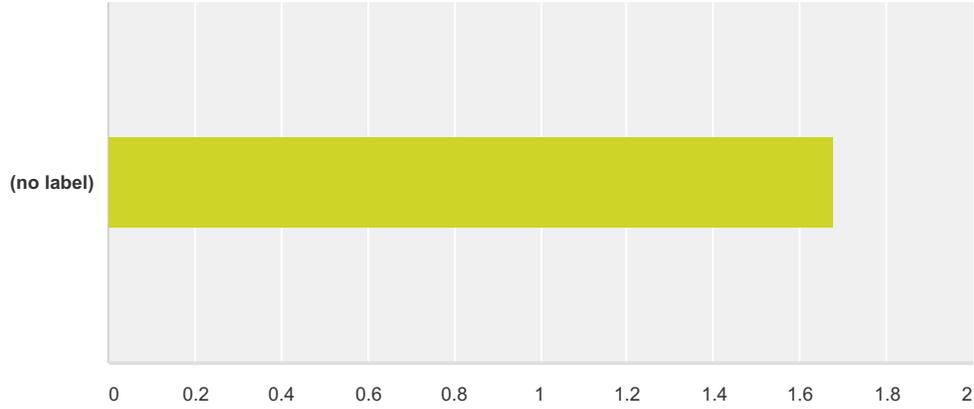
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	56.52% 13	21.74% 5	13.04% 3	8.70% 2	23	1.74

#	Suggested revisions for standards:	Date
1	ESS3.A Natural Resources Add: 4-ESS3-1 Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment. ESS3.B Natural Hazards Add: K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to severe weather.	11/30/2015 8:42 PM
2	There is not enough rigor in these standards.	11/30/2015 3:07 PM
3	Ess3C does not seem age appropriate for kindergarten students.	11/29/2015 7:53 PM
4	Use the NGSS.	11/13/2015 11:06 AM

Earth and Human Activity (ESS3)

Q96 The majority of the standards in this strand can be assessed in the classroom and/or on a state assessment.

Answered: 22 Skipped: 238



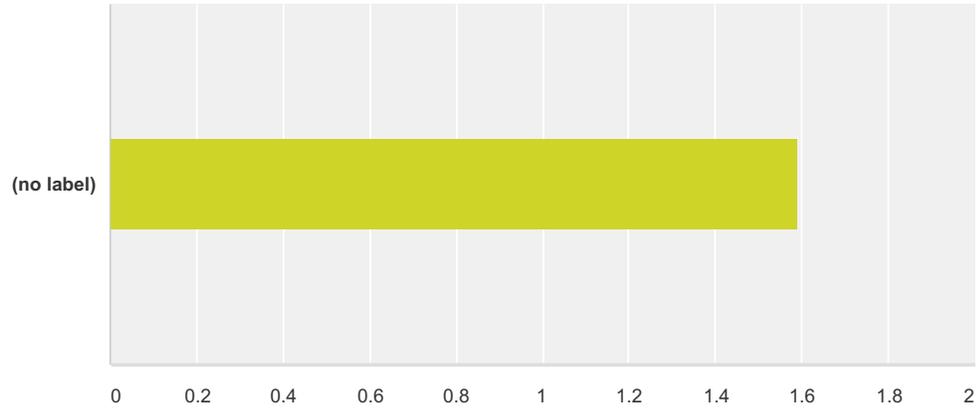
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	59.09% 13	22.73% 5	9.09% 2	9.09% 2	22	1.68

#	Suggested revisions for standards:	Date
1	Not enough depth or substance	11/30/2015 3:07 PM
2	Standards are too broad.	11/16/2015 2:49 PM
3	Use the NGSS.	11/13/2015 11:06 AM

Earth and Human Activity
(ESS3)

Q97 The standards in this strand are understandable to educators and explainable to parents and other stakeholders.

Answered: 22 Skipped: 238



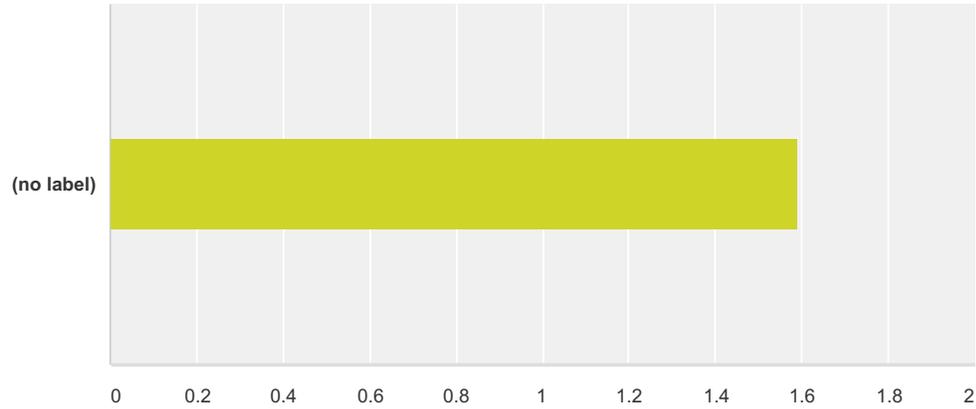
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	63.64% 14	22.73% 5	4.55% 1	9.09% 2	22	1.59

#	Suggested revisions for standards:	Date
1	Use the NGSS.	11/13/2015 11:06 AM

Earth and Human
Activity (ESS3)

Q98 The standards in this strand represent the necessary content for a student to reach college and/or career readiness upon graduation.

Answered: 22 Skipped: 238



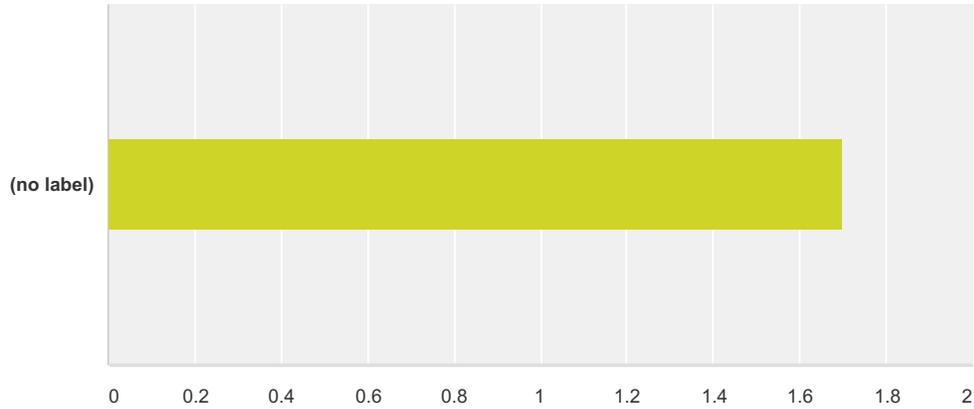
	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	63.64% 14	22.73% 5	4.55% 1	9.09% 2	22	1.59

#	Suggested revisions for standards:	Date
1	Use the NGSS.	11/13/2015 11:06 AM

Earth and Human Activity (ESS3)

Q99 The standards in this strand are accurate and encompass the breadth of the content.

Answered: 23 Skipped: 237



	1. Standards are acceptable as is. Overall the standards are listed at the appropriate grade level.	2. Standards are acceptable, edits would improve, but are not mandatory. Very few (minor) issues.	3. Standards are acceptable after they are revised as suggested immediately below.	4. Standards require complete rewrite. Majority of standards are at inappropriate grade levels.	Total	Weighted Average
(no label)	56.52% 13	26.09% 6	8.70% 2	8.70% 2	23	1.70

#	Suggested revisions for standards:	Date
1	ESS3.A Natural Resources Add: 4-ESS3-1 Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment. ESS3.B Natural Hazards Add: K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to severe weather.	11/30/2015 8:42 PM
2	The standards are too narrow	11/30/2015 2:59 PM
3	Use the NGSS.	11/13/2015 11:06 AM

Earth and Human
Activity (ESS3)

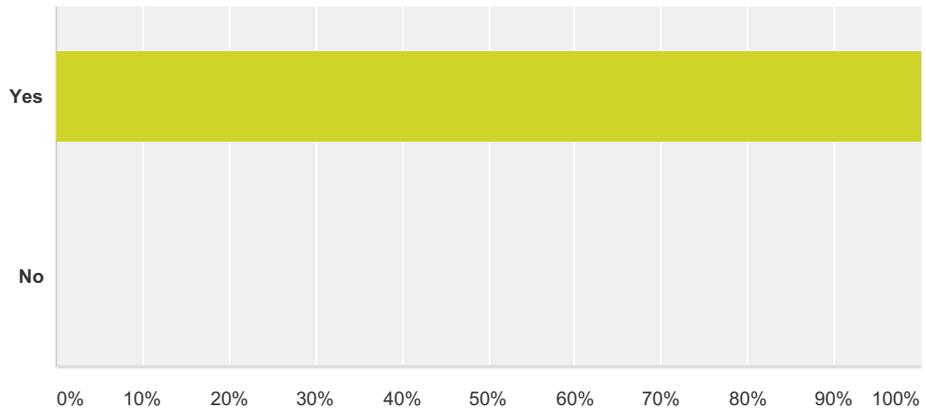
**Q100 Overall comments regarding the
proposed standards for Earth and Human
Activity (ESS3):**

Answered: 9 Skipped: 251

#	Responses	Date
1	ESS3C (Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the environment.) * This standard would need to be a "with guidance" standard in order to be developmental appropriate for Kindergarten.	12/2/2015 8:00 PM
2	This is a general comment. I am placing it here because there is no place for general comments. Please consider adding engineering standards to the elementary standards. It would be a disservice to our students if those standards were left out.	12/2/2015 7:49 PM
3	Would like to see a more Pro Agriculture influence in this area. We, as humans, are responsible to be good stewards of the resources available. Also, do not agree that humans should be listed as a "natural hazard" to the environment. Again, a Pro Ag viewpoint should be given some type of influence, especially as Missouri has such a rich agricultural background and the resource we are to the world in food production.	12/2/2015 5:38 PM
4	In all of these standards for Kindergarten, where is sink and float, comparing weight, shadows, rocks and minerals, changes in water, and effects of moving water.	12/1/2015 12:27 PM
5	ESS3.A Natural Resources Add: 4-ESS3-1 Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment. ESS3.B Natural Hazards Add: K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to severe weather. ESS3.C Human Impacts on Earth Systems No changes	11/30/2015 8:42 PM
6	All of the proposed science standards seem broad, almost vague, compared to the specific current standards.	11/29/2015 7:53 PM
7	Overall, the science standards have been extremely pushed down. Many standards have been added to each grade level, but nothing has been taken off. We need to prioritize the standards and give teachers an amount of standards that they can teach well with the time they are given. The science standard are very wordy and technically written. Writing them in student-friendly language would help curriculum writers, teachers and students alike.	11/24/2015 12:43 PM
8	These comments apply to all of the proposed standards. I appreciate all of the time and efforts your committee has spent on constructing these. There are a few sentences throughout that look like part of it was left out. I feel that this a LOT of material to cover in the time I have allotted to teach Science. Because of the emphasis on ELA and Math, I have 30 minutes twice a week to teach Science OR Social Studies. My fear is that with the added material to teach, I will not be able to go into depth as I should for the students to master the content. I will just be introducing the topic, and hoping that they will remember enough to pass the test. This will put my students at a disadvantage when they are studying the topic again in later grades. The teachers will have to re-teach the content in order to just catch the students up to where they should be. I know I speak for my co-teachers as well; we just do not have the time to do this subject matter justice.	11/14/2015 1:16 PM
9	Let's use the Next Generation Science Standards. This is ridiculous that we spend so much time and money on trying to figure out what standards to teach our kids when the Next Generation Science Standards are already written and easy to follow. Quit trying to reinvent the wheel.	11/13/2015 11:06 AM

Q102 Do you work or reside in Missouri?

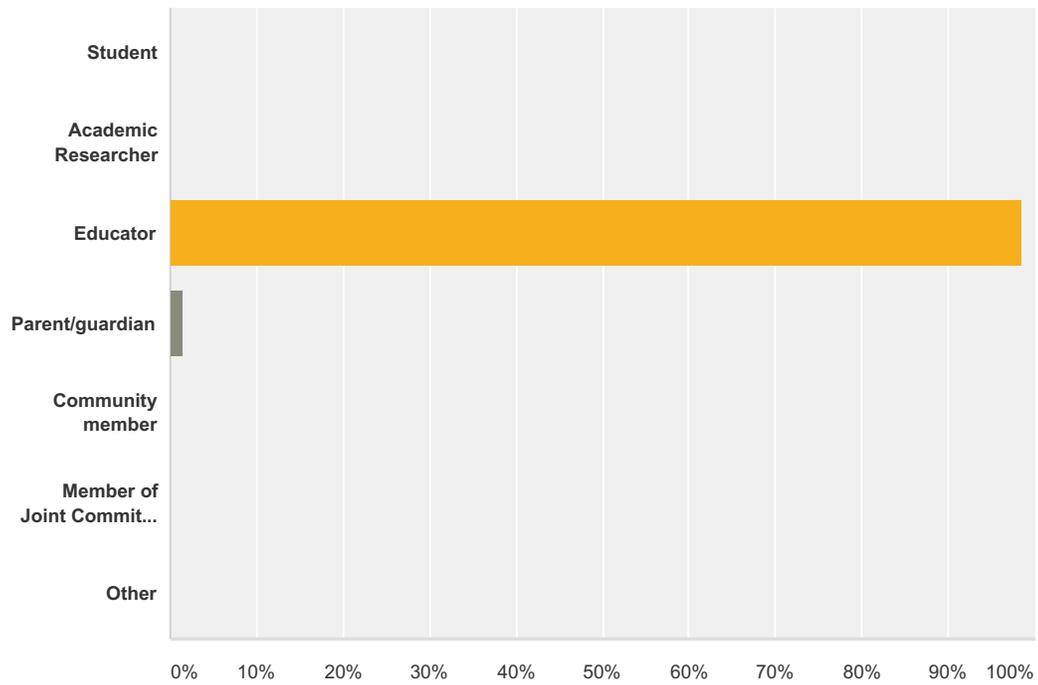
Answered: 145 Skipped: 115



Answer Choices	Responses	
Yes	100.00%	145
No	0.00%	0
Total		145

Q103 How might you define your relationship to Missouri schools?

Answered: 145 Skipped: 115



Answer Choices	Responses
Student	0.00% 0
Academic Researcher	0.00% 0
Educator	98.62% 143
Parent/guardian	1.38% 2
Community member	0.00% 0
Member of Joint Committee on Education	0.00% 0
Other	0.00% 0
Total	145

Q104 What is your work or residential zip code?

Answered: 124 Skipped: 136

#	Responses	Date
1	64485	12/2/2015 10:42 PM
2	64424	12/2/2015 8:08 PM
3	64057	12/2/2015 7:49 PM
4	63841	12/2/2015 5:39 PM
5	65550	12/2/2015 4:30 PM
6	64683	12/2/2015 4:20 PM
7	64064	12/2/2015 2:45 PM
8	63670	12/2/2015 2:41 PM
9	63901	12/2/2015 10:39 AM
10	63801	12/2/2015 9:42 AM
11	65203	12/2/2015 7:56 AM
12	63501	12/2/2015 5:37 AM
13	63303	12/1/2015 11:32 PM
14	63390	12/1/2015 9:15 PM
15	63552	12/1/2015 6:46 PM
16	63556	12/1/2015 12:56 PM
17	63701	12/1/2015 9:32 AM
18	63017	12/1/2015 9:30 AM
19	64485	12/1/2015 9:29 AM
20	63501	12/1/2015 8:16 AM
21	63501	11/30/2015 4:02 PM
22	63501	11/30/2015 3:32 PM
23	63501	11/30/2015 3:12 PM
24	63501	11/30/2015 3:01 PM
25	65712	11/30/2015 2:54 PM
26	63501	11/30/2015 2:35 PM
27	63501	11/30/2015 2:17 PM
28	63501	11/30/2015 2:15 PM
29	63501	11/30/2015 2:14 PM
30	63501	11/30/2015 2:12 PM
31	63501	11/30/2015 2:11 PM
32	63501	11/30/2015 2:08 PM
33	63501	11/30/2015 2:05 PM
34	63501	11/30/2015 1:36 PM

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35	64701	11/30/2015 1:35 PM
36	63822	11/30/2015 1:33 PM
37	63501	11/30/2015 1:30 PM
38	63501	11/30/2015 1:28 PM
39	63501	11/30/2015 1:28 PM
40	63501	11/30/2015 1:28 PM
41	63501	11/30/2015 1:15 PM
42	63501	11/30/2015 1:07 PM
43	63627	11/30/2015 12:56 PM
44	63556	11/30/2015 12:37 PM
45	65712	11/30/2015 10:33 AM
46	63501	11/30/2015 9:39 AM
47	63501	11/30/2015 9:39 AM
48	63501	11/30/2015 9:39 AM
49	63501	11/30/2015 9:25 AM
50	65721	11/29/2015 8:56 PM
51	65721	11/29/2015 8:40 PM
52	65721	11/29/2015 8:23 PM
53	65721	11/29/2015 8:12 PM
54	65721	11/29/2015 8:01 PM
55	65721	11/29/2015 7:50 PM
56	65608	11/28/2015 9:45 AM
57	64056	11/24/2015 12:44 PM
58	63701	11/24/2015 11:19 AM
59	63122	11/23/2015 2:39 PM
60	65109	11/23/2015 1:13 AM
61	65672	11/20/2015 3:30 PM
62	63101	11/20/2015 2:55 PM
63	63080	11/20/2015 2:42 PM
64	63080	11/20/2015 12:36 PM
65	63080	11/20/2015 9:13 AM
66	65340	11/19/2015 9:38 AM
67	64831	11/18/2015 2:47 PM
68	64831	11/18/2015 2:47 PM
69	64854	11/18/2015 2:38 PM
70	64856	11/18/2015 2:37 PM
71	65807	11/18/2015 1:18 PM
72	65601	11/18/2015 1:17 PM
73	64024	11/18/2015 12:55 PM
74	64093	11/16/2015 2:50 PM
75	64093	11/16/2015 2:35 PM

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76	64093	11/16/2015 2:33 PM
77	64093	11/16/2015 2:28 PM
78	64029	11/16/2015 2:28 PM
79	64093	11/16/2015 2:22 PM
80	64093	11/16/2015 2:20 PM
81	64093	11/16/2015 2:19 PM
82	64029	11/16/2015 2:19 PM
83	64029	11/16/2015 2:16 PM
84	64854	11/16/2015 12:27 PM
85	64834	11/14/2015 1:16 PM
86	65775	11/13/2015 4:31 PM
87	64083	11/13/2015 2:24 PM
88	63730	11/13/2015 2:00 PM
89	63769	11/13/2015 1:57 PM
90	63730	11/13/2015 1:55 PM
91	63730	11/13/2015 1:51 PM
92	63901	11/13/2015 1:50 PM
93	63655	11/13/2015 1:50 PM
94	63655	11/13/2015 1:46 PM
95	63730	11/13/2015 1:44 PM
96	63936	11/13/2015 1:43 PM
97	63732	11/13/2015 12:42 PM
98	63766	11/13/2015 11:35 AM
99	63766	11/13/2015 11:32 AM
100	64505	11/13/2015 11:07 AM
101	63755	11/13/2015 10:54 AM
102	63730	11/13/2015 10:49 AM
103	63769	11/13/2015 10:49 AM
104	63662	11/13/2015 10:47 AM
105	63662	11/13/2015 10:43 AM
106	63769	11/13/2015 10:40 AM
107	63769	11/13/2015 10:31 AM
108	63787	11/12/2015 9:33 PM
109	63304	11/12/2015 7:40 PM
110	63537	11/11/2015 2:19 PM
111	63537	11/11/2015 2:16 PM
112	65251	11/10/2015 4:33 PM
113	63116	11/10/2015 2:00 PM
114	65010	11/9/2015 3:19 PM
115	63025	11/6/2015 1:17 PM
116	63441	11/4/2015 12:22 PM

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117	63445	11/4/2015 11:57 AM
118	64631	11/4/2015 11:27 AM
119	65721	11/2/2015 5:42 PM
120	65714	11/2/2015 5:42 PM
121	65721	11/2/2015 5:40 PM
122	65721	11/2/2015 5:37 PM
123	65721	11/2/2015 5:29 PM
124	63468	10/26/2015 3:27 PM

Q105 Which Missouri department of higher education institute do you represent?

Answered: 0 Skipped: 260

#	Responses	Date
	There are no responses.	

Q106 What is your current role at this institution?

Answered: 0 Skipped: 260

#	Responses	Date
	There are no responses.	

Q107 How long have you worked in higher education?

Answered: 0 Skipped: 260

! No matching responses.

Answer Choices	Responses
0-5 Years	0.00% 0
6-10 Years	0.00% 0
11-15 Years	0.00% 0
16-20 Years	0.00% 0
20+ Years	0.00% 0
Total	0

Q108 List any current course(s) you teach:

Answered: 0 Skipped: 260

#	Responses	Date
	There are no responses.	

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Q109 Name:

Answered: 0 Skipped: 260

#	Responses	Date
	There are no responses.	