

	A	B	C	D	E	F
1	Missouri Grade 5 Science Test Blueprint and Test Design—2017 Administration					
2						
3	Science Core Points by Content Strand					
4	Strand			# of Points	Percent of Total	
5	1. ME: Properties And Principles Of Matter And Energy			7–8	12–13%	
6	2. FM: Properties And Principles Of Force And Motion			5–6	8–10%	
7	3. LO: Characteristics And Interactions Of Living Organisms			5–6	8–10%	
8	4. EC: Changes In Ecosystems And Interactions Of Organisms With Their Environments			5–7	8–12%	
9	5. ES: Processes And Interactions Of The Earth’s Systems			7–10	12–17%	
10	6. UN: Composition And Structure Of The Universe And The Motions Of The Objects Within It			6–7	10–12%	
11	7. IN: Process Of Scientific Inquiry			14–17	23–28%	
12	8. ST: Impact Of Science, Technology, And Human Activity			5–6	8–10%	
13	Total Grade 5 Science			60	100%	
14						
15	Science Test Form Design—Forms 2 and 3					
16	Session	Session Description		Total Items	Total Points	Recommended Session Time (min)
17	1	Constructed Response		14	28	45–55
18	2	Selected Response		18	18	20–25
19	3	Performance Event		9	14	45–65
20	Total			41	60	110–145

Missouri Grade 8 Science Test Blueprint and Test Design—2017 Administration

Science Core Points by Content Strand		
Strand	# of Points	Percent of Total
1. ME: Properties And Principles Of Matter And Energy	7–8	12–13%
2. FM: Properties And Principles Of Force And Motion	5–6	8–10%
3. LO: Characteristics And Interactions Of Living Organisms	5–6	8–10%
4. EC: Changes In Ecosystems And Interactions Of Organisms With Their Environments	5–7	8–12%
5. ES: Processes And Interactions Of The Earth’s Systems	7–10	12–17%
6. UN: Composition And Structure Of The Universe And The Motions Of The Objects Within It	6–7	10–12%
7. IN: Process Of Scientific Inquiry	14–17	23–28%
8. ST: Impact Of Science, Technology, And Human Activity	5–6	8–10%
Total Grade 8 Science	60	100%

Science Test Form Design—Form 2				
Session	Session Description	Total Items	Total Points	Recommended Session Time (min)
1	Constructed Response	14	28	45–55
2	Selected Response	16	16	20–25
3	Performance Event	9	17	45–65
Total		39	61	110–145

Science Test Form Design—Form 3				
Session	Session Description	Total Items	Total Points	Recommended Session Time (min)
1	Constructed Response	14	28	45–55
2	Selected Response	15	15	20–25
3	Performance Event	9	17	45–65
Total		38	60	110–145

Number of Science Forms in the Spring 2017 Administration	
Grade	Number of Online Forms
5	3 total: 2 Operational 1 Transcription*
8	3 total: 2 Operational 1 Transcription*

* Transcription form to be used for Braille, LP & Print Accommodations

Number of Items and Points in the Science On-line Test Forms			
Grade	Form	Total Items	Total Points
5	2	41	60
5	3	41	60
8	2	39	61
8	3	38	60

Science Timing Estimates		
Grade Session	Recommended Range	Recommended Range (Total Test)
Grades 5 Session 1	45–55	110–145
Grades 5 Session 2	20–25	
Grades 5 Session 3	45–65	
Grade 8 Session 1	45–55	110–145
Grade 8 Session 2	20–25	
Grade 8 Session 3	45–65	