

Missouri MAP Grade-Level Blueprints

A test blueprint is a map and or a table of specifications for an assessment program to identify the structure of the assessment which ensures that the Missouri Learning Standards Expectations are covered by the assessment program over a specified period of time. The blueprint links the assessment to the content areas acting as a tool to align objectives to the appropriate weightage and questions across the strands.

Blueprints provide the essential planning materials for the assessment development process. The test blueprints are used to guide and target specific item development and writing as well as the form assembly. The blueprint along with item specifications, performance–level descriptors and the practice and processes documents provide strong content validity and reliability for the assessment system.

Assessments may contain selected response (SR) items, evidence-based selected response (EBSR), constructed response (CR) items, writing tasks (WT), performance events (PE) and/or technology enhanced (TE) items (e.g. drag and drop, drop-down menu, matching, select answers, hot spot, etc.)

Mathematics Groupings

- **Reporting Category** - Represent a group / groups of similar content standards / expectations within each grade and content area
- **Domain** – Larger groups of content standards/expectations that are closely related
- **Cluster** - Represents the core principles of what the students have been taught and have learned
- **Point Range** - Identifies the points possible for the reporting strand
- **Range of Emphasis** - Identifies the percentage of the assessment in the reporting strand

English Language Arts Groupings

- **Reporting Category** - Represent a group / groups of similar content standards / expectations within each grade and content area
- **Strand/Domain** - Larger groups of content standards/expectations that are closely related
- **Theme/Big Idea** - Represents the core principles of what the students have been taught and have learned
- **Point Range** - Identifies the points possible for the reporting category
- **Range of Emphasis** - Identifies the percentage of the assessment to the reporting category

Science Groupings

- **Recommended Reporting Category** - Represent a group / groups of similar content standards / expectations within each grade and content area
- **Domain** – Larger groups of content standards/expectations that are closely related
- **Cluster** - Represents the core principles of what the students have been taught and have learned
- **Point Range** - Identifies the points possible for the reporting category
- **Range of Emphasis** - Identifies the percentage of the assessment to the reporting category

Mathematics

Blueprint for Grade 3 Mathematics

Reporting Category	Domain	Cluster	Point Range	Range Of Emphasis
NBT	Number Sense and Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic	8-10	17-21%
NF	Number Sense and Operations in Fractions	Develop understanding of fractions as numbers	8-10	17-21%
RA	Relationships and Algebraic Thinking	Represent and solve problems involving multiplication and division	8-18	17-36%
		Understand properties of multiplication and the relationship between multiplication and division		
		Multiply and divide within 100		
		Use the four operations to solve word problems		
		Identify and explain arithmetic patterns		
GM+DS	Geometry and Measurement	Reason with shapes and their attributes	7-16	14-32%
		Solve problems involving the measurement of time, liquid volumes and weights of objects		
		Understand concepts of area		
		Understand concepts of perimeter		
	Data and Statistics	Represent and analyze data		
Performance Event: Each year the performance event (PE) may align to any specific reporting category. The grade 3 PE contains multiple SR and/or TE items.			6	13%
Total			48	100%

Mathematics

Blueprint for Grade 4 Mathematics

Reporting Category	Domain	Cluster	Point Range	Range Of Emphasis
NBT	Number Sense and Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic with numbers up to one million	9-11	19-23%
NF	Number Sense and Operations in Fractions	Extend understanding of fraction equivalence and ordering (Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12 and 100)	8-14	16-29%
		Extend understanding of operations on whole numbers to fraction operations		
		Understand decimal notation for fractions, and compare decimal fractions (Denominators of 10 or 100)		
RA	Relationships and Algebraic Thinking	Use the four operations with whole numbers to solve problems	5-11	10-22%
		Work with factors and multiples		
		Generate and analyze patterns		
GM+DS	Geometry and Measurement	Classify 2-dimensional shapes by properties of their lines and angles	7-13	14-27%
		Understand the concepts of angle and measure angles		
		Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit		
	Data and Statistics	Represent and analyze data	3-5	6-10%
Performance Event: Each year the performance event (PE) may align to any specific reporting category. The grade 4 PE contains multiple SR and/or TE items.			6	13%
Total			48	100%

Mathematics

Blueprint for Grade 5 Mathematics

Reporting Category	Domain	Cluster	Point Range	Range Of Emphasis
NBT	Number Sense and Operations in Base Ten	Use place value system understanding to perform operations with multi-digit whole numbers to billions and decimals to thousandths	7-9	15-19%
NF	Number Sense and Operations in Fractions	Understand the relationship between fractions and decimals (denominators that are factors of 100)	11-15	23-31%
		Perform operations and solve problems with fractions and decimals		
RA	Relationships and Algebraic Thinking	Represent and analyze patterns and relationships	5-11	10-22%
		Write and interpret numerical expressions		
		Use the four operations to represent and solve problems		
GM+DS	Geometry and Measurement	Classify two- and three-dimensional geometric shapes	6-14	12-28%
		Understand and compute volume		
		Graph points on the Cartesian coordinate plane within the first quadrant to solve problems		
		Solve problems involving measurement and conversions within a measurement system		
	Data and Statistics	Represent and analyze data	2-4	4-8%
Performance Event: Each year the performance event (PE) may align to any specific reporting category. The grade 5 PE contains multiple SR and/or TE items.			6	13%
Total			48	100%

Mathematics

Blueprint for Grade 6 Mathematics

Reporting Category	Domain	Cluster	Point Range	Range Of Emphasis
RP	Ratios and Proportional Relationship	Understand and use ratios to solve problems	7-9	13-17%
NS	Number Sense and Operations	Apply and extend previous understandings of multiplication and division to divide fractions by fractions	9-14	17-26%
		Compute with non-negative multi-digit numbers, and find common factors and multiples		
		Apply and extend previous understandings of numbers to the system of rational numbers		
EEI	Expressions, Equations and Inequalities	Apply and extend previous understandings of arithmetic to algebraic expressions	12-18	22-34%
		Reason about and solve one-variable equations and inequalities		
		Represent and analyze quantitative relationships between dependent and independent variables		
GM & DSP	Geometry and Measurement	Solve problems involving area, surface area and volume	10-15	19-28%
	Data Analysis, Statistics and Probability	Develop understanding of statistical variability		
		Summarize and describe distributions		
Performance Event: Each year the performance event (PE) may align to any specific reporting category. The grade 6 PE contains multiple SR and/or TE items.			8	15%
Total			54	100%

Mathematics

Blueprint for Grade 7 Mathematics

Reporting Category	Domain	Cluster	Point Range	Range Of Emphasis
RP	Ratios and Proportional Relationship	Analyze proportional relationships and use them to solve problems	10-12	19-22%
NS	Number Sense and Operations	Apply and extend previous understandings of operations to add, subtract, multiply and divide rational numbers	8-10	15-19%
EEI	Expressions, Equations and Inequalities	Use properties of operations to generate equivalent expressions	11-15	20-28%
		Solve problems using numerical and algebraic expressions and equations		
GM & DSP	Geometry and Measurement	Draw and describe geometrical figures and describe the relationships between them	4-8	8-14%
		Apply and extend previous understanding of angle measure, area and volume		
	Data Analysis, Statistics and Probability	Use random sampling to draw inferences about a population	5-10	10-19%
		Draw informal comparative inferences about two populations		
Develop, use and evaluate probability models				
Performance Event: Each year the performance event (PE) may align to any specific reporting category. The grade 7 PE contains multiple SR and/or TE items.			8	15%
Total			54	100%

Mathematics

Blueprint for Grade 8 Mathematics

Reporting Category	Domain	Cluster	Point Range	Range Of Emphasis
NS + EEI	Number Sense and Operations	Know that there are numbers that are not rational, and approximate them by rational numbers	2-4	4-7%
	Expressions, Equations and Inequalities	Work with radicals and integer exponents	15-21	28-39%
		Understand the connections between proportional relationships, lines and linear equations		
		Analyze and solve linear equations and inequalities and pairs of simultaneous linear equations		
GM + DSP	Geometry and Measurement	Understand congruence and similarity using physical models, transparencies or geometry software	9-15	17-28%
		Understand and apply the Pythagorean Theorem		
		Solve problems involving volume of cones, pyramids and spheres		
	Data Analysis, Statistics and Probability	Investigate patterns of association in bivariate data	3-5	6-9%
F	Functions	Define, evaluate and compare functions	7-11	13-20%
		Use functions to model relationships between quantities		
Performance Event: Each year the performance event (PE) may align to any specific reporting category. The grade 8 PE contains multiple SR and/or TE items.			8	15%
Total			54	100%

English Language Arts

Blueprint for Grade 3 English Language Arts

Reporting Category	Strand/ Domain	Theme/Big Idea	Point Range	Range of Emphasis	
Reading	Reading	Literacy	Develop and apply skills to the reading process	12-14	21-25%
			Develop and apply skills and strategies to comprehend, analyze and evaluate fiction, poetry and drama from a variety of cultures and times		
			Comprehend and analyze words, images, graphics, and sounds in various media and digital forms to impact meaning		
		Informational	Develop and apply skills to the reading process	12-14	21-25%
			Develop and apply skills and strategies to comprehend, analyze and evaluate nonfiction (e.g., narrative, information/explanatory, opinion, persuasive, argumentative) from a variety of cultures and times		
			Comprehend and analyze words, images, graphics, and sounds in various media and digital forms to impact meaning		
Research	Writing	Gather, analyze, evaluate and use information from a variety of sources	7-9	13-16%	
Writing	Writing	Apply a writing process to develop a text for audience and purpose	7-9	13-16%	
	Language	Communicate using conventions of English language	5-7	9-13%	
Speaking\ Listening	Speaking\ Listening	Listen for a purpose	7-9	13-16%	
		Listen for entertainment			
		Speak effectively in collaborative discussions			
		Speak effectively when presenting			
Total			56	100%	

English Language Arts

Blueprint for Grade 4 English Language Arts

Reporting Category	Strand/ Domain	Theme/Big Idea	Point Range	Range of Emphasis	
Reading	Reading	Literacy	Develop and apply skills to the reading process	12-14	21-25%
			Develop and apply skills and strategies to comprehend, analyze and evaluate fiction, poetry and drama from a variety of cultures and times		
			Comprehend and analyze words, images, graphics, and sounds in various media and digital forms to impact meaning		
		Informational	Develop and apply skills to the reading process	12-14	21-25%
			Develop and apply skills and strategies to comprehend, analyze and evaluate nonfiction (e.g., narrative, information/explanatory, opinion, persuasive, argumentative) from a variety of cultures and times		
			Comprehend and analyze words, images, graphics, and sounds in various media and digital forms to impact meaning		
Research	Writing	Gather, analyze, evaluate and use information from a variety of sources	7-9	13-16%	
Writing	Writing	Apply a writing process to develop a text for audience and purpose	2	4%	
		Compose well-developed writing texts for audience and purpose	8	14%	
	Language	Communicate using conventions of English language	4	7%	
Speaking\ Listening	Speaking\ Listening	Listen for a purpose	7-9	13-16%	
		Listen for entertainment			
		Speak effectively in collaborative discussions			
		Speak effectively when presenting			
Total			56	100%	

English Language Arts

Blueprint for Grade 5 English Language Arts

Reporting Category	Strand/ Domain	Theme/Big Idea	Point Range	Range of Emphasis	
Reading	Reading	Literacy	Develop and apply skills to the reading process	12-14	21-25%
			Develop and apply skills and strategies to comprehend, analyze and evaluate fiction, poetry and drama from a variety of cultures and times		
			Comprehend and analyze words, images, graphics, and sounds in various media and digital forms to impact meaning		
		Informational	Develop and apply skills to the reading process	12-14	21-25%
			Develop and apply skills and strategies to comprehend, analyze and evaluate nonfiction (e.g., narrative, information/explanatory, opinion, persuasive, argumentative) from a variety of cultures and times		
			Comprehend and analyze words, images, graphics, and sounds in various media and digital forms to impact meaning		
Research	Writing	Gather, analyze, evaluate and use information from a variety of sources	7-9	13-16%	
Writing	Writing	Apply a writing process to develop a text for audience and purpose	7-9	13-16%	
	Language	Communicate using conventions of English language	5-7	9-13%	
Speaking\ Listening	Speaking\ Listening	Listen for a purpose	7-9	13-16%	
		Listen for entertainment			
		Speak effectively in collaborative discussions			
		Speak effectively when presenting			
Total			56	100%	

English Language Arts

Blueprint for Grade 6 English Language Arts

Reporting Category	Strand/ Domain	Theme/Big Idea		Point Range	Range of Emphasis
Reading	Reading	Literacy	Comprehend and Interpret Texts (Approaching Texts as a Reader)	13-15	23-27%
			Analyze Craft and Structure (Approaching Texts as a Writer)		
			Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher)		
		Informational	Comprehend and Interpret Texts (Approaching Texts as a Reader)	13-15	23-27%
			Analyze Craft and Structure (Approaching Texts as a Writer)		
			Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher)		
Research	Writing	Approaching the Task as a Researcher		7-9	13-16%
Writing	Writing	Approaching the Task as a Reader		8	15%
Speaking\ Listening	Speaking\ Listening	Collaborating		7-9	13-16%
		Presenting			
Total				56	100%

English Language Arts

Blueprint for Grade 7 English Language Arts

Reporting Category	Strand/ Domain	Theme/Big Idea		Point Range	Range of Emphasis
Reading	Reading	Literacy	Comprehend and Interpret Texts (Approaching Texts as a Reader)	13-15	25-29%
			Analyze Craft and Structure (Approaching Texts as a Writer)		
			Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher)		
		Informational	Comprehend and Interpret Texts (Approaching Texts as a Reader)	13-15	25-29%
			Analyze Craft and Structure (Approaching Texts as a Writer)		
			Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher)		
Research	Writing	Approaching the Task as a Researcher		7-9	13-17%
Writing	Writing	Approaching the Task as a Reader		7-9	13-17%
Speaking\ Listening	Speaking\ Listening	Collaborating		7-9	13-17%
		Presenting			
Total				52	100%

English Language Arts

Blueprint for Grade 8 English Language Arts

Reporting Category	Strand/ Domain	Theme/Big Idea		Point Range	Range of Emphasis
Reading	Reading	Literacy	Comprehend and Interpret Texts (Approaching Texts as a Reader)	13-15	23-27%
			Analyze Craft and Structure (Approaching Texts as a Writer)		
			Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher)		
		Informational	Comprehend and Interpret Texts (Approaching Texts as a Reader)	13-15	23-27%
			Analyze Craft and Structure (Approaching Texts as a Writer)		
			Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher)		
Research	Writing	Approaching the Task as a Researcher		7-9	13-16%
Writing	Writing	Approaching the Task as a Writer		8	14%
		Approaching the Task as a Reader		4	7%
Speaking\ Listening	Speaking\ Listening	Collaborating		7-9	13-16%
		Presenting			
Total				56	100%

Science

Blueprint for Grade 5 Science

Recommended Reporting Category	Domain	Cluster	Point Range	Range Of Emphasis
PS	Physical Science	Matter and Its Interactions	17-26	33-40%
		Motion and Stability: Forces and Interactions		
		Energy		
		Waves and Their Applications in Technologies for Information Transfer		
LS	Life Science	From Molecules to Organisms: Structure and Processes	15-22	30-33%
		Ecosystems: Interactions, Energy, and Dynamics		
		Heredity: Inheritance and Variation of Traits		
ESS	Earth and Space Sciences	Earth's Place in the Universe	15-22	30-33%
		Earth's Systems		
		Earth and Human Activity		
Total			60	100%

Blueprint for Grade 8 Science

Recommended Reporting Category	Domain	Cluster	Point Range	Range Of Emphasis
PS	Physical Science	Matter and Its Interactions	15-23	30-35%
		Motion and Stability: Forces and Interactions		
		Energy		
		Waves and Their Applications in Technologies for Information Transfer		
LS	Life Science	From Molecules to Organisms: Structure and Processes	15-23	30-35%
		Ecosystems: Interactions, Energy, and Dynamics		
		Heredity: Inheritance and Variation of Traits		
		Biological Evolution; Unity and Diversity		
ESS	Earth and Space Sciences	Earth's Place in the Universe	15-23	30-35%
		Earth's Systems		
		Earth and Human Activity		
Total			60	100%