

Interact Middle School Library Grades: 5, 6, 7, 8 States: Common Core State Standards

Interact Middle School Library: GEOMETRY CHALLENGE

Summary: Working alone, with partners, or in teams, students work on projects that focus on two-and three-dimensional diagrams and models and incorporate visualization, spatial reasoning, and geometric modeling. (9781573363778-INT935)

Common Core State Standards

Language Arts

Grade: 5 - Adopted 2010

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STRAND / DOMAIN	CCSS.ELA-Literacy.RI.5	Reading Standards for Informational Text
CATEGORY / CLUSTER		Integration of Knowledge and Ideas
STANDARD	CCSS.ELA-Literacy.RI.5.7	Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
STANDARD	CCSS.ELA-Literacy.RI.5.8	Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
STANDARD	CCSS.ELA-Literacy.RI.5.9	Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
STRAND / DOMAIN	CCSS.ELA-Literacy.RI.5	Reading Standards for Informational Text
CATEGORY / CLUSTER		Range of Reading and Level of Text Complexity
STANDARD	CCSS.ELA-Literacy.RI.5.10	By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4-5 text complexity band independently and proficiently.
STRAND / DOMAIN	CCSS.ELA-Literacy.RF.5	Reading Standards: Foundational Skills
CATEGORY / CLUSTER		Fluency
STANDARD	CCSS.ELA-Literacy.RF.5.4	Read with sufficient accuracy and fluency to support comprehension.
EXPECTATION	CCSS.ELA-Literacy.RF.5.4a	Read on-level text with purpose and understanding.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.5	Writing Standards
CATEGORY / CLUSTER		Text Types and Purposes
STANDARD	CCSS.ELA-Literacy.W.5.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
	CCSS.ELA-Literacy.W.5.2 CCSS.ELA-Literacy.W.5.2b	
		ideas and information clearly. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the

CLUSTER		
STANDARD	CCSS.ELA-Literacy.W.5.4	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
STRAND / DOMAIN	CCSS.ELA-Literacy.W.5	Writing Standards
CATEGORY / CLUSTER		Research to Build and Present Knowledge
STANDARD	CCSS.ELA-Literacy.W.5.7	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
STANDARD	CCSS.ELA-Literacy.W.5.8	Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.5	Writing Standards
CATEGORY / CLUSTER		Research to Build and Present Knowledge
STANDARD	CCSS.ELA-Literacy.W.5.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
EXPECTATION	CCSS.ELA-Literacy.W.5.9b	Apply grade 5 reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]").
STRAND / DOMAIN	CCSS.ELA-Literacy.W.5	Writing Standards
	CCSS.ELA-Literacy.W.5	Writing Standards Range of Writing
DOMAIN CATEGORY /	CCSS.ELA-Literacy.W.5 CCSS.ELA-Literacy.W.5.10	
DOMAIN CATEGORY / CLUSTER		Range of Writing Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks,
DOMAIN CATEGORY / CLUSTER STANDARD STRAND /	CCSS.ELA-Literacy.W.5.10	Range of Writing Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
DOMAIN CATEGORY / CLUSTER STANDARD STRAND / DOMAIN CATEGORY /	CCSS.ELA-Literacy.W.5.10	Range of Writing Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. Speaking and Listening Standards
DOMAIN CATEGORY / CLUSTER STANDARD STANDARD CATEGORY / CLUSTER STANDARD	CCSS.ELA-Literacy.W.5.10 CCSS.ELA-Literacy.SL.5	Range of Writing Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. Speaking and Listening Standards Comprehension and Collaboration Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own
DOMAIN CATEGORY / CLUSTER STANDARD STANDARD CATEGORY / CLUSTER STANDARD EXPECTATION	CCSS.ELA-Literacy.W.5.10 CCSS.ELA-Literacy.SL.5 CCSS.ELA-Literacy.SL.5.1	Range of Writing Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. Speaking and Listening Standards Comprehension and Collaboration Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under

Grade: 6 - Adopted 2010

STRAND / DOMAIN	CCSS.ELA-Literacy.RI.6	Reading Standards for Informational Text
CATEGORY / CLUSTER		Integration of Knowledge and Ideas
STANDARD	CCSS.ELA-Literacy.RI.6.7	Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.6	Writing Standards
CATEGORY / CLUSTER		Text Types and Purposes
STANDARD	CCSS.ELA-Literacy.W.6.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection,

		organization, and analysis of relevant content.
EXPECTATION	CCSS.ELA-Literacy.W.6.2b	Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.6	Writing Standards
CATEGORY / CLUSTER		Production and Distribution of Writing
STANDARD	CCSS.ELA-Literacy.W.6.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
STRAND / DOMAIN	CCSS.ELA-Literacy.W.6	Writing Standards
CATEGORY / CLUSTER		Research to Build and Present Knowledge
STANDARD	CCSS.ELA-Literacy.W.6.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
STANDARD	CCSS.ELA-Literacy.W.6.8	Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.6	Writing Standards
CATEGORY / CLUSTER		Range of Writing
STANDARD	CCSS.ELA-Literacy.W.6.10	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
STRAND / DOMAIN	CCSS.ELA-Literacy.SL.6	Speaking and Listening Standards
CATEGORY / CLUSTER		Comprehension and Collaboration
STANDARD	CCSS.ELA-Literacy.SL.6.1	Engage effectively in a range of collaborative discussions (one-on- one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.
EXPECTATION	CCSS.ELA-Literacy.SL.6.1a	Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
EXPECTATION	CCSS.ELA-Literacy.SL.6.1b	Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.
EXPECTATION	CCSS.ELA-Literacy.SL.6.1c	Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.
STRAND / DOMAIN	CCSS.ELA-Literacy.SL.6	Speaking and Listening Standards
CATEGORY / CLUSTER		Presentation of Knowledge and Ideas
STANDARD	CCSS.ELA-Literacy.SL.6.6	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

Grade: 7 - Adopted 2010

STRAND / DOMAIN	CCSS.ELA-Literacy.RI.7	Reading Standards for Informational Text
CATEGORY / CLUSTER		Key Ideas and Details
STANDARD	CCSS.ELA-Literacy.RI.7.3	Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).
STRAND / DOMAIN	CCSS.ELA-Literacy.W.7	Writing Standards

CATEGORY / CLUSTER		Text Types and Purposes
STANDARD	CCSS.ELA-Literacy.W.7.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
EXPECTATION	CCSS.ELA-Literacy.W.7.2b	Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.7	Writing Standards
CATEGORY / CLUSTER		Production and Distribution of Writing
STANDARD	CCSS.ELA-Literacy.W.7.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
STRAND / DOMAIN	CCSS.ELA-Literacy.W.7	Writing Standards
CATEGORY / CLUSTER		Research to Build and Present Knowledge
STANDARD	CCSS.ELA-Literacy.W.7.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.
STANDARD	CCSS.ELA-Literacy.W.7.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.7	Writing Standards
CATEGORY / CLUSTER		Range of Writing
STANDARD	CCSS.ELA-Literacy.W.7.10	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
STRAND / DOMAIN	CCSS.ELA-Literacy.SL.7	Speaking and Listening Standards
CATEGORY / CLUSTER		Comprehension and Collaboration
STANDARD	CCSS.ELA-Literacy.SL.7.1	Engage effectively in a range of collaborative discussions (one-on- one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.
EXPECTATION	CCSS.ELA-Literacy.SL.7.1a	Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
EXPECTATION	CCSS.ELA-Literacy.SL.7.1b	Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.
EXPECTATION	CCSS.ELA-Literacy.SL.7.1c	Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.
EXPECTATION	CCSS.ELA-Literacy.SL.7.1d	Acknowledge new information expressed by others and, when

Grade: 8 - Adopted 2010

STRAND / DOMAIN	CCSS.ELA-Literacy.W.8	Writing Standards
CATEGORY / CLUSTER		Text Types and Purposes
STANDARD	-	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
EXPECTATION	CCSS.ELA-Literacy.W.8.2b	Develop the topic with relevant, well-chosen facts, definitions,

		concrete details, quotations, or other information and examples.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.8	Writing Standards
CATEGORY / CLUSTER		Production and Distribution of Writing
STANDARD	CCSS.ELA-Literacy.W.8.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
STRAND / DOMAIN	CCSS.ELA-Literacy.W.8	Writing Standards
CATEGORY / CLUSTER		Research to Build and Present Knowledge
STANDARD	CCSS.ELA-Literacy.W.8.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
STANDARD	CCSS.ELA-Literacy.W.8.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.8	Writing Standards
CATEGORY / CLUSTER		Range of Writing
STANDARD	CCSS.ELA-Literacy.W.8.10	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
STRAND / DOMAIN	CCSS.ELA-Literacy.SL.8	Speaking and Listening Standards
CATEGORY / CLUSTER		Comprehension and Collaboration
STANDARD	CCSS.ELA-Literacy.SL.8.1	Engage effectively in a range of collaborative discussions (one-on- one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.
EXPECTATION	CCSS.ELA-Literacy.SL.8.1a	Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
EXPECTATION	CCSS.ELA-Literacy.SL.8.1b	Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.
EXPECTATION	CCSS.ELA-Literacy.SL.8.1c	Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.
EXPECTATION	CCSS.ELA-Literacy.SL.8.1d	Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.

Mathematics

Grade: 5 - Adopted 2010

STRAND / DOMAIN	CCSS.Math.Practice	Mathematical Practices
CATEGORY / CLUSTER	CCSS.Math.Practice.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP2	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP3	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP5	Use appropriate tools strategically.

CATEGORY / CLUSTER	CCSS.Math.Practice.MP6	Attend to precision.
STRAND / DOMAIN	CCSS.Math.Content.5.G	Geometry
CATEGORY / CLUSTER	CCSS.Math.Content.5.G.B	Classify two-dimensional figures into categories based on their properties.
STANDARD	CCSS.Math.Content.5.G.B.4	Classify two-dimensional figures in a hierarchy based on properties.

Grade: 6 - Adopted 2010

STRAND / DOMAIN	CCSS.Math.Practice	Mathematical Practices
CATEGORY / CLUSTER	CCSS.Math.Practice.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP2	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP3	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP5	Use appropriate tools strategically.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP6	Attend to precision.

Grade: 7 - Adopted 2010

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STRAND / DOMAIN	CCSS.Math.Practice	Mathematical Practices
CATEGORY / CLUSTER	CCSS.Math.Practice.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP2	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP3	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP5	Use appropriate tools strategically.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP6	Attend to precision.
STRAND / DOMAIN	CCSS.Math.Content.7.G	Geometry
CATEGORY / CLUSTER	CCSS.Math.Content.7.G.A	Draw construct, and describe geometrical figures and describe the relationships between them.
STANDARD	CCSS.Math.Content.7.G.A.2	Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.
STRAND / DOMAIN	CCSS.Math.Content.7.G	Geometry
CATEGORY / CLUSTER	CCSS.Math.Content.7.G.B	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.
STANDARD	CCSS.Math.Content.7.G.B.5	Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.

STRAND / DOMAIN	CCSS.Math.Practice	Mathematical Practices	
CATEGORY / CLUSTER	CCSS.Math.Practice.MP1	Make sense of problems and persevere in solving them.	
CATEGORY / CLUSTER	CCSS.Math.Practice.MP2	Reason abstractly and quantitatively.	
CATEGORY / CLUSTER	CCSS.Math.Practice.MP3	Construct viable arguments and critique the reasoning of others.	
CATEGORY / CLUSTER	CCSS.Math.Practice.MP5	Use appropriate tools strategically.	

Grade: 8 - Adopted 2010

CATEGORY/ CLUSTER	CCSS.Math.Practice.MP6	Attend to precision.
STRAND / DOMAIN	CCSS.Math.Content.8.G	Geometry
CATEGORY / CLUSTER	CCSS.Math.Content.8.G.A	Understand congruence and similarity using physical models, transparencies, or geometry software.
STANDARD	CCSS.Math.Content.8.G.A.5	Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.