Interact Middle School Library
Grades: 4, 5, 6
States: Common Core State Standards

Interact Middle School Library: SPACE PROBE: A Math Simulation in Which Students Develop Scientific Probes to Explore the Universe
Summary: Learning concepts and skills such as pi and its relationship to circumference and scale drawing, student "research companies" create small-scale models for three types of space probes: rotor, cylinder, and glider. In the process, students expand their knowledge of metric measurement, apply formulas, use statistics, and graph results. (9781573363082-INT989)

Common Core State Standards

Language Arts

Grade: **4** - Adopted **2010**

STRAND / DOMAIN	CCSS.ELA-Literacy.RI.4	Reading Standards for Informational Text
CATEGORY / CLUSTER		Integration of Knowledge and Ideas
STANDARD	CCSS.ELA-Literacy.RI.4.8	Explain how an author uses reasons and evidence to support particular points in a text.
STRAND / DOMAIN	CCSS.ELA-Literacy.RI.4	Reading Standards for Informational Text
CATEGORY / CLUSTER		Range of Reading and Level of Text Complexity
STANDARD	CCSS.ELA-Literacy.RI.4.10	By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
STRAND / DOMAIN	CCSS.ELA-Literacy.RF.4	Reading Standards: Foundational Skills
CATEGORY / CLUSTER		Fluency
STANDARD	CCSS.ELA-Literacy.RF.4.4	Read with sufficient accuracy and fluency to support comprehension.
EXPECTATION	CCSS.ELA-Literacy.RF.4.4a	Read on-level text with purpose and understanding.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.4	Writing Standards
CATEGORY / CLUSTER		Text Types and Purposes
STANDARD	CCSS.ELA-Literacy.W.4.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
EXPECTATION	CCSS.ELA-Literacy.W.4.2b	Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.4	Writing Standards
CATEGORY / CLUSTER		Production and Distribution of Writing
STANDARD	CCSS.ELA-Literacy.W.4.4	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.4**	Writing Standards
CATEGORY / CLUSTER		Research to Build and Present Knowledge
STANDARD	CCSS.ELA-Literacy.W.4.7	Conduct short research projects that build knowledge through investigation of different aspects of a topic.
STANDARD	CCSS.ELA-Literacy.W.4.8	Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.
STRAND / DOMAIN	**CCSS.ELA-Literacy.W.4**	Writing Standards
CATEGORY / CLUSTER		Research to Build and Present Knowledge
STANDARD	CCSS.ELA-Literacy.W.4.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
EXPECTATION	CCSS.ELA-Literacy.W.4.9b	Apply grade 4 reading standards to informational texts (e.g., ''Explain how an author uses reasons and evidence to support particular points in a text'').
STRAND / DOMAIN	**CCSS.ELA-Literacy.W.4**	Writing Standards
CATEGORY / CLUSTER		Range of Writing
STANDARD	CCSS.ELA-Literacy.W.4.10	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.4**	Speaking and Listening Standards
CATEGORY / CLUSTER		Comprehension and Collaboration
STANDARD	CCSS.ELA-Literacy.SL.4.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.
EXPECTATION	CCSS.ELA-Literacy.SL.4.1a	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 discussion.
EXPECTATION	CCSS.ELA-Literacy.SL.4.1b	Follow agreed-upon rules for discussions and carry out assigned roles.
EXPECTATION	CCSS.ELA-Literacy.SL.4.1c	Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
STRAND / DOMAIN	**CCSS.ELA-Literacy.SL.4**	Speaking and Listening Standards
CATEGORY / CLUSTER		Presentation of Knowledge and Ideas
STANDARD	CCSS.ELA-Literacy.SL.4.6	Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.
STRAND / DOMAIN	**CCSS.ELA-Literacy.L.4**	Language Standards
CATEGORY / CLUSTER		Knowledge of Language
STANDARD	CCSS.ELA-Literacy.L.4.3	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
EXPECTATION	CCSS.ELA-Literacy.L.4.3c	Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).

Grade: **5** - Adopted **2010**

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.
EXPECTATION	CCSS.ELA-Literacy.W.5.2b	Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
STRAND / DOMAIN	CCSS.ELA-Literacy.W.5	Writing Standards
CATEGORY / CLUSTER		Production and Distribution of Writing
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

CATEGORY / CLUSTER		Range of Writing
STANDARD	CCSS.ELA- Literacy.W.5.10	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.5	Speaking and Listening Standards
CATEGORY / CLUSTER		Comprehension and Collaboration
STANDARD	CCSS.ELA- Literacy.SL.5.1	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.
EXPECTATION	CCSS.ELA- Literacy.SL.5.1a	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 discussion.
EXPECTATION	CCSS.ELA- Literacy.SL.5.1b	Follow agreed-upon rules for discussions and carry out assigned roles.
EXPECTATION	CCSS.ELA- Literacy.SL.5.1c	Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.

<p align="center">Grade: 6 - Adopted 2010</p>

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.

Mathematics

Grade: **4** - 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: **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.

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.