

# Odyssey of the Mind

## **How OM Meets Education Standards**

Beyond the Boxs experience

#### Deep Learning is aligned with:

- Includes rigorous content and application of knowledge through higher-order skills
- Built upon strengths and lessons of current state standards
- · Informed by top-performing countries, so that all students are prepared to succeed in our global economy
- Evidence and/or research-based
- Aligned with college and work expectations

English/ Language Arts	Odyssey Teams
Key Ideas and Details	<ul> <li>All problems require team members to read closely to determine what the text says explicitly and to make logical inferences from it.</li> <li>Cite specific textual evidence when writing or speaking to support conclusions drawn from the text.</li> </ul>
	Analyze how and why individuals, events, and ideas develop and interact over the course of a text.
Craft and Structure	<ul> <li>Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively as well as in words.</li> </ul>
	<ul> <li>Analyze the structure of texts. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.</li> </ul>
Integrations of Knowledge and Ideas	<ul> <li>Team members analyze how two or more texts address similar themes or topics in order to build knowledge. Delineate and evaluate the argument and specific claims in a text.</li> </ul>
	<ul> <li>Integrate and evaluate content presented in diverse formats and media, including visually and quantitativel as well as in words.</li> </ul>
ange of Reading and Level of Text Complexity	<ul> <li>Each problem requires students to read and comprehend complex literary and informational texts independently and proficiently in order to solve the problems.</li> </ul>

Math	Odyssey Teams
Make sense of problems and persevere in solving them	<ul> <li>Team members start by explaining to themselves the meaning of a problem and looking for entry points to its solution.</li> <li>They analyze givens, constraints, relationships, and goals.</li> <li>They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt.</li> </ul>
Reason abstractly and quantitatively	<ul> <li>Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; conside the unit/parts involved; attend to the meaning</li> </ul>
Construct viable arguments and critique the reasoning of others	<ul> <li>The student must understand, and use stated assumptions, definitions, and previously established results in constructing arguments.</li> </ul>
Model with mathematics	<ul> <li>Utilizing problems arising in everyday life, society, and the workplace, students model mathematics in many phases of the problems.</li> </ul>
Use appropriate tools strategically	<ul> <li>Utilizing problems arising in everyday life, society, and the workplace, students model mathematics in many phases of the problems.</li> </ul>
Attend to precision	<ul> <li>Students, as team members, try to communicate precisely to others.</li> <li>They try to use clear definitions in discussion with others and in their own reasoning.</li> <li>They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context.</li> </ul>
Look for and make use of structure	<ul> <li>Students look closely to discern a pattern or structure within a given problem.</li> <li>They also can step back for an overview and shift perspective.</li> <li>They can see complicated things as single objects or as being composed of several objects.</li> </ul>
Look for and express regularity in	Students notice if calculations are repeated and look both for general methods and for shortcuts.

Look for and express regularity in repeated reasoning



Reading Standards for Literacy in Science and Technology Subjects (RST)	Odyssey Teams
Follow precisely a multistep procedure when carrying out experiments or performing technical tasks	<ul> <li>Team members start by explaining to themselves the meaning of a problem and looking for entry points to its solution.</li> <li>They analyze givens, constraints, relationships, and goals.</li> <li>They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt.</li> </ul>
Translate quantitative or technical information expressed in words in a text into a visual form	<ul> <li>Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; consider the unit/parts involved; attend to the meaning</li> </ul>
Compare and contrast findings presented, noting when findings support or contradict previous explanations	Students work as a team to compare and contrast findings as they develop their solutions.
Integrate and evaluate multiple sources of information presented in diverse formats and media	Students use multiple sources of information including a diversity of formats and media in their quest for solutions.
Evaluate the hypothesis, data, analysis, and conclusions found in science, verifying the data when possible and corroborating or challenging conclusions	Students naturally use the scientific method as they work through their long-term solutions.
Synthesize information from a range of sources into a coherent understanding	The synthesis of information from a range of sources comes together in a coherent presentation of the team's solution.



Writing Standards for Literacy in History/Social Studies, Science, and Technology Subjects	Odyssey Teams
Write arguments focused on a discipline-specific content	Many teams write a script to address the specifics of their solution.
Produce clear and coherent writing appropriate to task, purpose, and audience	Teams are encouraged to focus their script and their performance on a specific task, purpose, and audience.
Conduct short as well as sustained research projects to answer a question	Many aspects of Odyssey of the Mind require teams to conduct research to answer specific questions.
Gather relevant information from multiple sources	Odyssey teams gather material from multiple sources.
Reading Standards for Literacy in History/Social Studies (RST)	Odyssey Teams
Determine the central ideas or information of a primary or secondary source	<ul> <li>Team members work together to analyze both primary and secondary sources as they work with the problem and access resources as they search for a solution.</li> </ul>
Determine the meaning of words and phrases as they are used in a text	The meaning of words and phrases in the Odyssey of the Mind problems has an impact on each solution
Integrate visual information	Visual information can become an integral part of an Odyssey solution.
Distinguish among fact, opinion, and reasoned judgment	<ul> <li>As teams search for a solution, the ability to distinguish between fact, opinion, and reasoned judgment can be critical.</li> </ul>
Integrate and evaluate multiple sources of information presented in diverse formats and media in order to address a question or solve a	Teams integrate information from a wide variety of sources into their solutions     Standard
problem	

Next Generation Science Standards of Science and Engineering Practices	Odyssey Teams
Analyzing and Interpreting Data	<ul> <li>Throughout the problem-solving process teams continuously review, analyze, and interpret data as they develop their solutions building on past experiences and knowledge and seeking new information.</li> </ul>
Asking Questions and Defining Problems	Questioning and defining problems is an integral part of the problem-solving process.
Constructing Explanations and Defining Problems	<ul> <li>Odyssey teams collaborate to define problems and construct and often reconstruct explanations supported by multiple sources of evidence consistent with scientific knowledge, principles, and theories.</li> </ul>
Developing and Using Models	Students develop, design, and use models to predict, explain, or collect data to test ideas and develop solutions.
Engaging in Argument from Evidence	Using both oral and written arguments, teams use empirical evidence and data to design and support their solutions.
Obtaining, Evaluating, and Communicating Information	Odyssey teams generate, synthesis, communicate, and critique methods and designs as they seek solutions.
Planning and Carrying out Investigations	Students plan and carry out investigations that use multiple variables and provide evidence to support solutions.
Using Mathematics and Computational Thinking	Teams use mathematical and computational thinking to support solutions.

