

# STEAM Student Set Curricular Crosswalk Standards Alignment

## Overview

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This chart provides an overview of the standards that can be met, or extended to meet, with the [STEAM Student Set and Expansion Pack lessons](#).

Alignments included in this document:

- [STEAM Student Set, NGSS](#)
- [STEAM Student Set, Common Core](#)
- [STEAM Student Set Expansion Pack: Science, NGSS](#)
- [STEAM Student Set Expansion Pack: Science, Common Core](#)
- [STEAM Student Set Expansion Pack: Math, Common Core](#)

Use the [STEAM Student Set Invention Log](#) as a way to assess whether your students have fulfilled these standards. See the [Curriculum Guide](#) for additional information on assessment strategies and grade leveling.

# STEAM Student Set: NGSS

## Elementary (Grade 3-5)

IDENTIFIER	PERFORMANCE EXPECTATION	LESSONS THAT MEET THIS STANDARD	LESSONS THAT CAN BE EXTENDED TO MEET THIS STANDARD
3-5-ETS1-1	Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device
3-5-ETS1-2	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device
3-5-ETS1-3	Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	N/A
3-PS2-2	Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.	N/A	Invent an Art Machine; Invent a Throwing Arm
3-PS2-4	Define a simple design problem that can be solved by applying scientific ideas about magnets.	N/A	Introducing littleBits
4-PS3-1	Use evidence to construct an explanation relating the speed of an object to the energy of that object.	N/A	Invent a Self-Driving Car; Invent an Art Machine; Invent a Throwing Arm

4-PS3-2	Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electrical currents.	N/A	Introducing littleBits
4-PS3-3	Ask questions and predict outcomes about the changes in energy that occur when objects collide.	N/A	Invent a Throwing Arm
5-PS2-1	Support an argument that the gravitational force exerted by Earth on objects is directed down.	N/A	Invent a Throwing Arm

**Middle (Grade 6-8)**

IDENTIFIER	PERFORMANCE EXPECTATION	LESSONS THAT MEET THIS STANDARD	LESSONS THAT CAN BE EXTENDED TO MEET THIS STANDARD
MS-ETS1-1	Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	N/A
MS-ETS1-2	Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device
MS-ETS1-3	Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into new solutions to better meet the criteria for success.	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	N/A

MS-ETS1-4	Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.	Hack Your Habits	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption
MS-PS2-2	Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object	N/A	Invent a Throwing Arm
MS-PS3-1	Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object.	N/A	Invent a Self-Driving Car; Invent a Throwing Arm
MS-PS4-2	Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.	N/A	Invent a Security Device
MS-PS2-5	Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.	N/A	Introducing littleBits
MS-ESS3-3	Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.	N/A	Hack Your Habits

# STEAM Student Set: Common Core

## Elementary (Grade 3-5)

IDENTIFIER	SUBJECT	PERFORMANCE EXPECTATION	LESSONS THAT MEET THIS STANDARD	LESSONS THAT CAN BE EXTENDED TO MEET THIS STANDARD
W.3.2	ELA	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.	N/A	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.3.3	ELA	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	N/A
W.3.7	ELA	Conduct short research projects that build knowledge about a topic.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.3.8	ELA	Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
SL3.4	ELA	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	N/A

SL3.6	ELA	Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	
W.4.2	ELA	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.	N/A	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.4.3	ELA	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	N/A
W.4.7	ELA	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.4.8	ELA	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.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.4.9	ELA	Draw evidence from literary or informational texts to support analysis, reflection, and research.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
SL4.4	ELA	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a	N/A

		relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	
W.5.2	ELA	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.	N/A	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.5.7	ELA	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.5.8	ELA	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.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.5.9	ELA	Draw evidence from literary or informational texts to support analysis, reflection, and research.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
S.L5.4	ELA	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	N/A

RI.5.9	ELA	Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
MP2	MATH	Reason abstractly and quantitatively.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device
MP5	MATH	Use appropriate tools strategically.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	
MP6	MATH	Attend to precision.	Hack Your Habits	Invent an Art Machine, Invent a Throwing Arm

**Middle (Grade 6-8)**

IDENTIFIER	SUBJECT	PERFORMANCE EXPECTATION	LESSONS THAT MEET THIS STANDARD	LESSONS THAT CAN BE EXTENDED TO MEET THIS STANDARD
W.6.1	ELA	Write arguments to support claims with clear reasons and relevant evidence.	N/A	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.6.2	ELA	Write informative and explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.	N/A	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits

W.6.3	ELA	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.6.7	ELA	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.6.10	ELA	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.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device
SL.6.4	ELA	Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	N/A
SL.6.5	ELA	Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.7.1	ELA	Write arguments to support claims with clear reasons and relevant evidence.	N/A	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits

W.7.2	ELA	Write informative and explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.	N/A	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.7.3	ELA	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.7.7	ELA	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.7.10	ELA	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.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device
SL.7.4	ELA	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	N/A
SL.7.5	ELA	Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits

W.8.1	ELA	Write arguments to support claims with clear reasons and relevant evidence.	N/A	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.8.2	ELA	Write informative and explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.	N/A	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.8.3	ELA	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.8.7	ELA	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.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
W.8.10	ELA	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.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device
SL.8.4	ELA	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device, Hack Your	N/A

		appropriate eye contact, adequate volume, and clear pronunciation.	Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	
SL.8.5	ELA	Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.	N/A	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits
MP2	MATH	Reason abstractly and quantitatively.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	Invent a Self-Driving Car, Invent an Art Machine, Invent a Throwing Arm, Invent a Security Device
MP5	MATH	Use appropriate tools strategically.	Hack Your Classroom, Invent for Good, Invent a Chain Reaction Contraption, Hack Your Habits	N/A
MP6	MATH	Attend to precision.	Hack Your Habits	Invent an Art Machine, Invent a Throwing Arm

# Expansion Pack: Science, NGSS

## Elementary (Grade 3-5)

IDENTIFIER	PERFORMANCE EXPECTATION	LESSONS THAT MEET THIS STANDARD	LESSONS THAT CAN BE EXTENDED TO MEET THIS STANDARD
3-5-ETS1-1	Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.	Invent a Creature, Invent for Earth	Makey Makey Masterminds
3-5-ETS1-2	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	Accelerometer Adventure	Invent a Creature; Invent for Earth
3-5-ETS1-3	Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	Makey Makey Masterminds	Accelerometer Adventure, Reactive Organisms
3-LS2-1	Construct an argument that some animals form groups that help members survive.	Invent a Creature	N/A
3-LS3-2	Use evidence to support the explanation that traits can be influenced by the environment.	Reactive Organisms	N/A
3-LS4-2	Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.	Invent a Creature	N/A
3-LS4-3	Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.	Invent a Creature	N/A

3-LS4-4	Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.*	N/A	Invent a Creature
3-ESS2-1	Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.	Invent for Earth	N/A
3-ESS3-1	Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.	Environmental Alerts	N/A
4-LS1-1	Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.	Invent a Creature	N/A
4-LS1-2	Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.	Reactive Organisms	N/A
4-PS3-2	Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electrical currents.	N/A	Makey Makey Masterminds
4-ESS3-1	Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.	Invent for Earth	N/A
4-ESS3-2	Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.	Environmental Alerts	N/A
5-LS1-1	Support an argument that plants get the materials they need for growth chiefly from air and water.	Invent a Creature	N/A

5-LS2-1	Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	Reactive Organisms	N/A
5-PS1-3	Make observations and measurements to identify materials based on their properties.	N/A	Makey Makey Masterminds
5-ESS3-1	Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	Environmental Alerts, Invent for Earth	N/A

## Expansion Pack: Science, Common Core

### Elementary (Grade 3-5)

IDENTIFIER	SUBJECT	PERFORMANCE EXPECTATION	LESSONS THAT MEET THIS STANDARD	LESSONS THAT CAN BE EXTENDED TO MEET THIS STANDARD
W.3.2	ELA	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.	Environmental Alerts, Invent a Creature, Invent for Earth	N/A
W.3.3	ELA	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.	Environmental Alerts, Invent a Creature, Invent for Earth	N/A
W.3.7	ELA	Conduct short research projects that build knowledge about a topic.	Makey Makey Masterminds, Reactive Organisms, Invent a Creature, Invent for Earth	N/A
W.3.8	ELA	Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.	Invent for Earth	Invent a Creature

SL3.4	ELA	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	Environmental Alerts, Invent a Creature, Invent for Earth	Accelerometer Adventure
SL3.6	ELA	Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.	Makey Makey Masterminds, Accelerometer Adventure, Environmental Alerts, Reactive Organisms, Invent a Creature, Invent for Earth	N/A
W.4.2	ELA	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.	Accelerometer Adventure, Environmental Alerts, Invent a Creature, Invent for Earth	N/A
W.4.1	ELA	Write opinion pieces on topics or texts, supporting a point of view with reasons and information.	Accelerometer Adventure, Invent for Earth	N/A
W.4.3	ELA	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.	Reactive Organisms, Invent a Creature, Invent for Earth	N/A
W.4.7	ELA	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	Makey Makey Masterminds, Environmental Alerts, Invent for Earth	Invent a Creature
W.4.8	ELA	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.	Environmental Alerts, Invent for Earth	Invent a Creature
W.4.9	ELA	Draw evidence from literary or informational texts to support analysis, reflection, and research.	Makey Makey Masterminds, Environmental Alerts, Invent for Earth	N/A

SL4.4	ELA	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	Reactive Organisms, Invent for Earth	N/A
W.5.2	ELA	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.	Accelerometer Adventure, Environmental Alerts, Reactive Organisms, Invent a Creature, Invent for Earth	N/A
W.5.7	ELA	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	Makey Makey Masterminds, Environmental Alerts, Invent for Earth	Invent a Creature
W.5.9	ELA	Draw evidence from literary or informational texts to support analysis, reflection, and research.	Accelerometer Adventure, Reactive Organisms, Environmental Alerts, Invent a Creature, Invent for Earth	N/A
S.L5.4	ELA	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	Reactive Organisms, Environmental Alerts, Invent for Earth	N/A
RI.5.9	ELA	Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.	Reactive Organisms, Environmental Alerts, Invent for Earth	Invent a Creature

# Expansion Pack: Math, Common Core

## Elementary (Grade 3-5)

IDENTIFIER	SUBJECT	PERFORMANCE EXPECTATION	LESSONS THAT MEET THIS STANDARD	LESSONS THAT CAN BE EXTENDED TO MEET THIS STANDARD
3.OA.A	MATH	Represent and solve problems involving multiplication and division.	Magic Number Game, Cipher Sleuth, Scrambler Challenge, Lock Out Safe, Booby Trap	
3.NF.A	MATH	Develop understanding of fractions as numbers	Magic Number Game, Cipher Sleuth, Scrambler Challenge, Booby Trap	
3.MD.B	MATH	Represent and interpret data.	Lock Out Safe	
3.G.A	MATH	Reason with shapes and their attributes.	Booby Trap	
4.OA.A	MATH	Use the four operations with whole numbers to solve problem	Magic Number Game, Scrambler Challenge	
4.OA.C.5	MATH	Generate and analyze patterns	Lock Out Safe, Booby Trap	
4.NBT.A	MATH	Use place value understanding and properties of operations to perform multi-digit arithmetic.	Magic Number Game, Cipher Sleuth,	
4.NF.A	MATH	Extend understanding of fraction equivalence and ordering.	Booby Trap	
4.NF.C	MATH	Understand decimal notation for fractions, and compare decimal fractions.	Cipher Sleuth, Booby Trap	

4.G.A	MATH	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	Scrambler Challenge	
4.MD.A	MATH	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	Booby Trap	
4.MD.B	MATH	Represent and interpret data.	Lock Out Safe	
5.OA.B.3	MATH	Analyze patterns and relationships.	Lock Out Safe, Booby Trap	
5.NBT.A	MATH	Understand the place value system.	Magic Number Game, Cipher Sleuth,	
5.NBT.B	MATH	Perform operations with multi-digit whole numbers and with decimals to the hundredths.	Scrambler Challenge, Booby Trap	
5.NF.B	MATH	Apply and extend previous understandings of multiplication and division.	Cipher Sleuth, Booby Trap	Scrambler Challenge
5.MD.A	MATH	Convert like measurement units within a given measurement system.	Scrambler Challenge	
5.G.B	MATH	Classify two-dimensional figures into categories based on their properties.	Lock Out Safe	
W.3.1	ELA	Write opinion pieces on topics or texts, supporting a point of view with reasons and information.		Cipher Sleuth
W.4.1	ELA	Write opinion pieces on topics or texts, supporting a point of view with reasons and information.		Cipher Sleuth
W.5.1	ELA	Write opinion pieces on topics or texts, supporting a point of view with reasons and information.		Cipher Sleuth