

Main Criteria: California Content Standards

Secondary Criteria: LEGO® Education BricQ Motion Prime, LEGO® Education SPIKE™ Prime

Subject: Science Grades: 6, 7, 8

Correlation Options: Show Correlated

## California Content Standards

Science

Grade: 6 - Adopted: 2013

CONTENT STANDARD / DOMAIN / PART	CA.MS-PS.	PHYSICAL SCIENCE
PERFORMANCE STANDARD / MODE	MS-PS3.	Energy
EXPECTATION / SUBSTRAND		Students who demonstrate understanding can:
FOUNDATION / PROFICIENCY LEVEL	MS-PS3-3.	Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.
		<u>LEGO® Education SPIKE™ Prime</u> Training Trackers: Warm-Up
FOUNDATION / PROFICIENCY LEVEL	MS-PS3-4.	Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.
		LEGO® Education SPIKE™ Prime Training Trackers: Aim for It Training Trackers: This is Uphill Training Trackers: Time for Squat Jumps Training Trackers: Watch Your Steps
FOUNDATION / PROFICIENCY LEVEL	MS-PS3-5.	Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.
		LEGO® Education SPIKE™ Prime Training Trackers: Aim for It Training Trackers: This is Uphill Training Trackers: Time for Squat Jumps Training Trackers: Watch Your Steps
CONTENT STANDARD / DOMAIN / PART	CA.MS-ESS.	EARTH AND SPACE SCIENCE
PERFORMANCE STANDARD / MODE	MS-ESS3.	Earth and Human Activity
EXPECTATION / SUBSTRAND		Students who demonstrate understanding can:
FOUNDATION / PROFICIENCY LEVEL	MS-ESS3-3.	Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.
		<u>LEGO® Education SPIKE™ Prime</u> Prime Combined: Lesson 1 Smart House: Go Green
		<u>LEGO® Education BricQ Motion Prime</u> Prime Combined: Lesson 1 Smart House: Go Green
CONTENT STANDARD / DOMAIN / PART	CA.MS-ETS.	ENGINEERING DESIGN
PERFORMANCE STANDARD / MODE	MS-ETS1.	Engineering Design
EXPECTATION / SUBSTRAND		Students who demonstrate understanding can:

FOUNDATION / PROFICIENCY LEVEL	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.
		LEGO® Education SPIKE™ Prime Competition Ready: Assembling an Advanced Driving Base Competition Ready: Mission Ready Competition Ready: The Guided Mission Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects Competition Ready: Training Camp 3: Reacting to Lines Extra Resources: Pass the Brick Extra Resources: What is this? Invention Squad: Help! Invention Squad: Hopper Race Kickstart A Business: Automate It! Kickstart A Business: Place Your Order Training Trackers: Stretch with Data Training Trackers: The Obstacle Course Training Trackers: Warm-Up
FOUNDATION / PROFICIENCY LEVEL	MS-ETS1-2.	Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
		LEGO® Education SPIKE™ Prime Extra Resources: Ideas, the LEGO way! Extra Resources: What is this? Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup Life Hacks: The Coach Prime Combined: Lesson 1 Smart House: Go Green Prime Combined: Lesson 2 Protect Our Produce Training Trackers: The Obstacle Course
		<u>LEGO® Education BricQ Motion Prime</u> Pass the Ball Prime Combined: Lesson 1 Smart House: Go Green Prime Combined: Lesson 2 Protect Our Produce
FOUNDATION / PROFICIENCY LEVEL	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 a new solution to better meet the criteria for success.
		LEGO® Education SPIKE™ Prime Extra Resources: Ideas, the LEGO way! Extra Resources: What is this? Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup Life Hacks: The Coach Training Trackers: The Obstacle Course
		<u>LEGO® Education BricQ Motion Prime</u> Pass the Ball

		ii -
FOUNDATION / PROFICIENCY LEVEL	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.  LEGO® Education SPIKE™ Prime Competition Ready: Assembling an Advanced Driving Base Competition Ready: Mission Ready Competition Ready: The Guided Mission Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects Competition Ready: Training Camp 3: Reacting to Lines Extra Resources: Ideas, the LEGO way! Extra Resources: What is this? Invention Squad: Design for Someone Invention Squad: Help! Invention Squad: Hopper Race Kickstart A Business: Automate It! Kickstart A Business: Place Your Order Life Hacks: The Coach Prime Combined: Lesson 1 Smart House: Go Green Prime Combined: Stretch with Data Training Trackers: The Obstacle Course Training Trackers: Warm-Up  LEGO® Education BricQ Motion Prime Pass the Ball Prime Combined: Lesson 1 Smart House: Go Green Prime Combined: Lesson 2 Protect Our Produce
CONTENT STANDARD / DOMAIN / PART	CA.RST.6-8.	Reading Standards for Literacy in Science and Technical Subjects
PERFORMANCE STANDARD / MODE		Key Ideas and Details
EXPECTATION / SUBSTRAND	RST.6-8.1.	Cite specific textual evidence to support analysis of science and technical texts.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
EXPECTATION / SUBSTRAND	RST.6-8.3.	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.
		<u>LEGO® Education BricQ Motion Prime</u> Propeller Car
CONTENT STANDARD / DOMAIN / PART	CA.RST.6-8.	Reading Standards for Literacy in Science and Technical Subjects
PERFORMANCE STANDARD / MODE		Integration of Knowledge and Ideas

EXPECTATION / SUBSTRAND	RST.6-8.7.	Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).
		LEGO® Education SPIKE™ Prime Competition Ready: Assembling an Advanced Driving Base Competition Ready: Mission Ready Competition Ready: My Code, Our Program Competition Ready: The Guided Mission Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects Competition Ready: Training Camp 3: Reacting to Lines Kickstart A Business: Automate It! Kickstart A Business: Keep It Really Safe! Kickstart A Business: Keep It Safe Kickstart A Business: Out of Order Kickstart A Business: Track Your Packages Life Hacks: Brain Game Life Hacks: Break Dance Life Hacks: Repeat 5 Times Life Hacks: Wind Speed Training Trackers: Stretch with Data Training Trackers: The Obstacle Course Training Trackers: Warm-Up
CONTENT STANDARD / DOMAIN / PART	CA.WHST.6- 8.	Writing Standards for Literacy in Science and Technical Subjects
PERFORMANCE STANDARD / MODE		Text Types and Purposes
EXPECTATION / SUBSTRAND	WHST.6-8.1.	Write arguments focused on discipline-specific content.
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.1.a.	Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.1.b.	Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.1.c.	Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.1.d.	Establish and maintain a formal style.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.1.e.	Provide a concluding statement or section that follows from and supports the argument presented.
		LEGO® Education SPIKE™ Prime Extra Resources: What is this? Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
CONTENT	CA.WHST.6-	Life Hacks: Veggie Love Writing Standards for Literacy in Science and Technical
STANDARD / DOMAIN / PART	8.	Subjects

PERFORMANCE STANDARD / MODE		Text Types and Purposes
EXPECTATION / SUBSTRAND	WHST.6-8.2.	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.2.a.	Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.2.b.	Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.2.d.	Use precise language and domain-specific vocabulary to inform about or explain the topic.
		LEGO® Education SPIKE™ Prime Competition Ready: Assembling an Advanced Driving Base Competition Ready: Mission Ready Competition Ready: My Code, Our Program Competition Ready: The Guided Mission Competition Ready: Time for an Upgrade Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects Competition Ready: Training Camp 3: Reacting to Lines Kickstart A Business: Automate It! Kickstart A Business: Keep It Really Safe! Kickstart A Business: Keep It Safe Kickstart A Business: Out of Order Kickstart A Business: Track Your Packages Training Trackers: Stretch with Data Training Trackers: The Obstacle Course Training Trackers: Warm-Up
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.2.f.	Provide a concluding statement or section that follows from and supports the information or explanation presented.
		<u>LEGO® Education SPIKE™ Prime</u> Extra Resources: What is this? Invention Squad: Broken Invention Squad: Super Cleanup Life Hacks: Veggie Love
CONTENT STANDARD / DOMAIN / PART	CA.WHST.6- 8.	Writing Standards for Literacy in Science and Technical Subjects
PERFORMANCE STANDARD / MODE		Production and Distribution of Writing
EXPECTATION / SUBSTRAND	WHST.6-8.4.	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
		<u>LEGO® Education SPIKE™ Prime</u> Extra Resources: What is this? Invention Squad: Broken Invention Squad: Super Cleanup Life Hacks: Veggie Love

## California Content Standards

Science

Grade: **7** - Adopted: **2013** 

CONTENT STANDARD / DOMAIN / PART	CA.MS-PS.	PHYSICAL SCIENCE
PERFORMANCE STANDARD / MODE		Matter and Its Interactions

EXPECTATION / SUBSTRAND		Students who demonstrate understanding can:
FOUNDATION / PROFICIENCY LEVEL	MS-PS1-1.	Develop models to describe the atomic composition of simple molecules and extended structures. <u>LEGO® Education SPIKE™ Prime</u> Competition Ready: Assembling an Advanced Driving Base
		Competition Ready: Mission Ready Competition Ready: My Code, Our Program Competition Ready: The Guided Mission Competition Ready: Time for an Upgrade Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects
		Competition Ready: Training Camp 3: Reacting to Lines Kickstart A Business: Automate It! Kickstart A Business: Keep It Really Safe! Kickstart A Business: Keep It Safe Kickstart A Business: Out of Order Kickstart A Business: Track Your Packages Training Trackers: Stretch with Data Training Trackers: The Obstacle Course
		Training Trackers: Warm-Up
CONTENT STANDARD / DOMAIN / PART	CA.MS-LS.	LIFE SCIENCE
PERFORMANCE STANDARD / MODE	MS-LS1.	From Molecules to Organisms: Structures and Processes
EXPECTATION / SUBSTRAND		Students who demonstrate understanding can:
FOUNDATION / PROFICIENCY LEVEL	MS-LS1-6.	Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.
		<u>LEGO® Education SPIKE™ Prime</u> Training Trackers: Warm-Up
FOUNDATION / PROFICIENCY LEVEL	MS-LS1-7.	Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.
		LEGO® Education SPIKE™ Prime Training Trackers: Warm-Up
CONTENT STANDARD / DOMAIN / PART	CA.MS-LS.	LIFE SCIENCE
PERFORMANCE STANDARD / MODE	MS-LS2.	Ecosystems: Interactions, Energy, and Dynamics
EXPECTATION / SUBSTRAND		Students who demonstrate understanding can:
FOUNDATION / PROFICIENCY LEVEL	MS-LS2-5.	Evaluate competing design solutions for maintaining biodiversity and ecosystem services.
		<u>LEGO® Education SPIKE™ Prime</u> Prime Combined: Lesson 1 Smart House: Go Green
		<u>LEGO® Education BricQ Motion Prime</u> Prime Combined: Lesson 1 Smart House: Go Green
CONTENT STANDARD / DOMAIN / PART	CA.MS-ETS.	ENGINEERING DESIGN
PERFORMANCE STANDARD / MODE	MS-ETS1.	Engineering Design
EXPECTATION / SUBSTRAND		Students who demonstrate understanding can:

FOUNDATION / PROFICIENCY LEVEL	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.
		LEGO® Education SPIKE™ Prime Competition Ready: Assembling an Advanced Driving Base Competition Ready: Mission Ready Competition Ready: The Guided Mission Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects Competition Ready: Training Camp 3: Reacting to Lines Extra Resources: Pass the Brick Extra Resources: What is this? Invention Squad: Help! Invention Squad: Hopper Race Kickstart A Business: Automate It! Kickstart A Business: Place Your Order Training Trackers: Stretch with Data Training Trackers: The Obstacle Course Training Trackers: Warm-Up
FOUNDATION / PROFICIENCY LEVEL	MS-ETS1-2.	Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
		LEGO® Education SPIKE™ Prime Extra Resources: Ideas, the LEGO way! Extra Resources: What is this? Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup Life Hacks: The Coach Prime Combined: Lesson 1 Smart House: Go Green Prime Combined: Lesson 2 Protect Our Produce Training Trackers: The Obstacle Course
		<u>LEGO® Education BricQ Motion Prime</u> Pass the Ball Prime Combined: Lesson 1 Smart House: Go Green Prime Combined: Lesson 2 Protect Our Produce
FOUNDATION / PROFICIENCY LEVEL	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 a new solution to better meet the criteria for success.
		LEGO® Education SPIKE™ Prime Extra Resources: Ideas, the LEGO way! Extra Resources: What is this? Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup Life Hacks: The Coach Training Trackers: The Obstacle Course
		<u>LEGO® Education BricQ Motion Prime</u> Pass the Ball

FOUNDATION / PROFICIENCY LEVEL	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.  LEGO® Education SPIKE™ Prime Competition Ready: Assembling an Advanced Driving Base Competition Ready: Mission Ready Competition Ready: The Guided Mission Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects Competition Ready: Training Camp 3: Reacting to Lines Extra Resources: Ideas, the LEGO way! Extra Resources: What is this? Invention Squad: Design for Someone Invention Squad: Help! Invention Squad: Hopper Race Kickstart A Business: Automate It! Kickstart A Business: Place Your Order Life Hacks: The Coach Prime Combined: Lesson 1 Smart House: Go Green Prime Combined: Stretch with Data Training Trackers: The Obstacle Course Training Trackers: Warm-Up  LEGO® Education BricQ Motion Prime Pass the Ball Prime Combined: Lesson 1 Smart House: Go Green Prime Combined: Lesson 2 Protect Our Produce
CONTENT STANDARD / DOMAIN / PART	CA.RST.6-8.	Reading Standards for Literacy in Science and Technical Subjects
PERFORMANCE STANDARD / MODE		Key Ideas and Details
EXPECTATION / SUBSTRAND	RST.6-8.1.	Cite specific textual evidence to support analysis of science and technical texts. <u>LEGO® Education SPIKE™ Prime</u>
		Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
EXPECTATION / SUBSTRAND	RST.6-8.3.	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.
		<u>LEGO® Education BricQ Motion Prime</u> Propeller Car
CONTENT STANDARD / DOMAIN / PART	CA.RST.6-8.	Reading Standards for Literacy in Science and Technical Subjects
PERFORMANCE STANDARD / MODE		Integration of Knowledge and Ideas

EXPECTATION / SUBSTRAND		Integrate quantitative or technical information expressed in words in a text with a version of that information expressed
SUBSTRAND		visually (e.g., in a flowchart, diagram, model, graph, or table).
		LEGO® Education SPIKE™ Prime Competition Ready: Assembling an Advanced Driving Base Competition Ready: Mission Ready Competition Ready: My Code, Our Program Competition Ready: The Guided Mission Competition Ready: Time for an Upgrade Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects Competition Ready: Training Camp 3: Reacting to Lines Kickstart A Business: Automate It! Kickstart A Business: Keep It Really Safe! Kickstart A Business: Keep It Safe Kickstart A Business: Out of Order Kickstart A Business: Out of Order Kickstart A Business: Track Your Packages Life Hacks: Brain Game Life Hacks: Break Dance Life Hacks: Repeat 5 Times Life Hacks: Wind Speed Training Trackers: Stretch with Data Training Trackers: The Obstacle Course Training Trackers: Warm-Up
CONTENT STANDARD / DOMAIN / PART	CA.WHST.6- 8.	Writing Standards for Literacy in Science and Technical Subjects
PERFORMANCE STANDARD / MODE		Text Types and Purposes
EXPECTATION / SUBSTRAND	WHST.6-8.1.	Write arguments focused on discipline-specific content.
FOUNDATION / PROFICIENCY LEVEL		Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL		Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL		Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL		Establish and maintain a formal style.
. NOTICIENT LEVEL		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.1.e.	Provide a concluding statement or section that follows from and supports the argument presented.
		LEGO® Education SPIKE™ Prime Extra Resources: What is this? Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup Life Hacks: Veggie Love
CONTENT STANDARD / DOMAIN / PART		Writing Standards for Literacy in Science and Technical Subjects

PERFORMANCE STANDARD / MODE		Text Types and Purposes
EXPECTATION / SUBSTRAND	WHST.6-8.2.	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.2.a.	Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
PROFICIENCY LEVEL	WHST.6- 8.2.b.	Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
		LEGO® Education SPIKE™ Prime Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.2.d.	Use precise language and domain-specific vocabulary to inform about or explain the topic.
		LEGO® Education SPIKE™ Prime Competition Ready: Assembling an Advanced Driving Base Competition Ready: Mission Ready Competition Ready: My Code, Our Program Competition Ready: The Guided Mission Competition Ready: Time for an Upgrade Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects Competition Ready: Training Camp 3: Reacting to Lines Kickstart A Business: Automate It! Kickstart A Business: Keep It Really Safe! Kickstart A Business: Keep It Safe Kickstart A Business: Out of Order Kickstart A Business: Track Your Packages Training Trackers: Stretch with Data Training Trackers: The Obstacle Course Training Trackers: Warm-Up
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.2.f.	Provide a concluding statement or section that follows from and supports the information or explanation presented.
		<u>LEGO® Education SPIKE™ Prime</u> Extra Resources: What is this? Invention Squad: Broken Invention Squad: Super Cleanup Life Hacks: Veggie Love
CONTENT STANDARD / DOMAIN / PART	CA.WHST.6- 8.	Writing Standards for Literacy in Science and Technical Subjects
PERFORMANCE STANDARD / MODE		Production and Distribution of Writing
EXPECTATION / SUBSTRAND	WHST.6-8.4.	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
		<u>LEGO® Education SPIKE™ Prime</u> Extra Resources: What is this? Invention Squad: Broken Invention Squad: Super Cleanup Life Hacks: Veggie Love

## California Content Standards

Science

Grade: 8 - Adopted: 2013

CONTENT STANDARD / DOMAIN / PART	CA.MS-PS.	PHYSICAL SCIENCE
PERFORMANCE STANDARD / MODE		Motion and Stability: Forces and Interactions

EXPECTATION / SUBSTRAND		Students who demonstrate understanding can:
FOUNDATION / PROFICIENCY LEVEL	MS-PS2-1.	Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects.
		<u>LEGO® Education SPIKE™ Prime</u> Prime Combined: Lesson 2 Protect Our Produce Training Trackers: Warm-Up
		<u>LEGO® Education BricQ Motion Prime</u> Prime Combined: Lesson 2 Protect Our Produce
FOUNDATION / PROFICIENCY LEVEL	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.
		<u>LEGO® Education SPIKE™ Prime</u> Training Trackers: Warm-Up
		<u>LEGO® Education BricQ Motion Prime</u> Pass the Ball Propeller Car
FOUNDATION / PROFICIENCY LEVEL	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.
		LEGO® Education SPIKE™ Prime Extra Resources: Going the Distance
CONTENT STANDARD / DOMAIN / PART	CA.MS-PS.	PHYSICAL SCIENCE
PERFORMANCE	MS-PS3.	Energy
STANDARD / MODE		
EXPECTATION / SUBSTRAND		Students who demonstrate understanding can:
EXPECTATION /	MS-PS3-1.	Students who demonstrate understanding can:  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.
EXPECTATION / SUBSTRAND FOUNDATION /	MS-PS3-1.	Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an
EXPECTATION / SUBSTRAND FOUNDATION /	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.  LEGO® Education BricQ Motion Prime Pass the Ball Propeller Car  LEGO® Education SPIKE™ Prime Training Trackers: Aim for It Training Trackers: This is Uphill Training Trackers: Time for Squat Jumps
EXPECTATION / SUBSTRAND FOUNDATION / PROFICIENCY LEVEL	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.  LEGO® Education BricQ Motion Prime Pass the Ball Propeller Car  LEGO® Education SPIKE™ Prime Training Trackers: Aim for It Training Trackers: This is Uphill Training Trackers: Time for Squat Jumps Training Trackers: Warm-Up Training Trackers: Watch Your Steps
EXPECTATION / SUBSTRAND FOUNDATION /	MS-PS3-1.  MS-PS3-2.	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.  LEGO® Education BricQ Motion Prime Pass the Ball Propeller Car  LEGO® Education SPIKE™ Prime Training Trackers: Aim for It Training Trackers: This is Uphill Training Trackers: Time for Squat Jumps Training Trackers: Warm-Up
EXPECTATION / SUBSTRAND  FOUNDATION / PROFICIENCY LEVEL  FOUNDATION /		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.  LEGO® Education BricQ Motion Prime Pass the Ball Propeller Car  LEGO® Education SPIKE™ Prime Training Trackers: Aim for It Training Trackers: This is Uphill Training Trackers: Time for Squat Jumps Training Trackers: Warm-Up Training Trackers: Warm-Up Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts
EXPECTATION / SUBSTRAND  FOUNDATION / PROFICIENCY LEVEL  FOUNDATION /		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.  LEGO® Education BricQ Motion Prime Pass the Ball Propeller Car  LEGO® Education SPIKE™ Prime Training Trackers: Aim for It Training Trackers: This is Uphill Training Trackers: Time for Squat Jumps Training Trackers: Warm-Up Training Trackers: Watch Your Steps  Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.  LEGO® Education SPIKE™ Prime
FOUNDATION / PROFICIENCY LEVEL  FOUNDATION / PROFICIENCY LEVEL  CONTENT STANDARD /	MS-PS3-2.	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.  LEGO® Education BricQ Motion Prime Pass the Ball Propeller Car  LEGO® Education SPIKE™ Prime Training Trackers: Aim for It Training Trackers: This is Uphill Training Trackers: Time for Squat Jumps Training Trackers: Warm-Up Training Trackers: Warm-Up Training Trackers: Watch Your Steps  Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.  LEGO® Education SPIKE™ Prime Training Trackers: The Obstacle Course

FOUNDATION / PROFICIENCY LEVEL	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.
		LEGO® Education SPIKE™ Prime Competition Ready: Assembling an Advanced Driving Base Competition Ready: Mission Ready Competition Ready: The Guided Mission Competition Ready: Time for an Upgrade Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects Competition Ready: Training Camp 3: Reacting to Lines Extra Resources: Pass the Brick Extra Resources: What is this? Invention Squad: Help! Invention Squad: Hopper Race Kickstart A Business: Automate It! Kickstart A Business: Place Your Order Training Trackers: Stretch with Data Training Trackers: The Obstacle Course Training Trackers: Warm-Up
FOUNDATION / PROFICIENCY LEVEL	MS-ETS1-2.	Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
		LEGO® Education SPIKE™ Prime Extra Resources: Ideas, the LEGO way! Extra Resources: What is this? Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup Life Hacks: The Coach Prime Combined: Lesson 1 Smart House: Go Green Prime Combined: Lesson 2 Protect Our Produce Training Trackers: The Obstacle Course
		LEGO® Education BricQ Motion Prime Pass the Ball Prime Combined: Lesson 1 Smart House: Go Green Prime Combined: Lesson 2 Protect Our Produce
FOUNDATION / PROFICIENCY LEVEL	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 a new solution to better meet the criteria for success.
		LEGO® Education SPIKE™ Prime Extra Resources: Ideas, the LEGO way! Extra Resources: What is this? Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup Life Hacks: The Coach Training Trackers: The Obstacle Course
		LEGO® Education BricQ Motion Prime Pass the Ball

FOUNDATION / PROFICIENCY LEVEL	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.  LEGO® Education SPIKE™ Prime Competition Ready: Assembling an Advanced Driving Base Competition Ready: Mission Ready Competition Ready: The Guided Mission Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects Competition Ready: Training Camp 3: Reacting to Lines Extra Resources: Ideas, the LEGO way! Extra Resources: Pass the Brick Extra Resources: What is this? Invention Squad: Design for Someone Invention Squad: Help! Invention Squad: Hopper Race Kickstart A Business: Automate It! Kickstart A Business: Place Your Order Life Hacks: The Coach Prime Combined: Lesson 1 Smart House: Go Green Prime Combined: Lesson 2 Protect Our Produce Training Trackers: Stretch with Data Training Trackers: The Obstacle Course Training Trackers: Warm-Up  LEGO® Education BricQ Motion Prime Pass the Ball Prime Combined: Lesson 1 Smart House: Go Green Prime Combined: Lesson 2 Protect Our Produce
CONTENT STANDARD / DOMAIN / PART	CA.RST.6-8.	Reading Standards for Literacy in Science and Technical Subjects
PERFORMANCE STANDARD / MODE		Key Ideas and Details
EXPECTATION / SUBSTRAND	RST.6-8.1.	Cite specific textual evidence to support analysis of science and technical texts.  LEGO® Education SPIKE™ Prime Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
EXPECTATION / SUBSTRAND	RST.6-8.3.	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. <u>LEGO® Education BricQ Motion Prime</u> Propeller Car
CONTENT STANDARD / DOMAIN / PART	CA.RST.6-8.	Reading Standards for Literacy in Science and Technical Subjects
PERFORMANCE STANDARD / MODE		Integration of Knowledge and Ideas

EXPECTATION / SUBSTRAND	RST.6-8.7.	Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).  LEGO® Education SPIKE™ Prime Competition Ready: Assembling an Advanced Driving Base Competition Ready: Mission Ready Competition Ready: My Code, Our Program Competition Ready: The Guided Mission Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects Competition Ready: Training Camp 3: Reacting to Lines Kickstart A Business: Automate It! Kickstart A Business: Keep It Really Safe! Kickstart A Business: Keep It Safe Kickstart A Business: Out of Order Kickstart A Business: Out of Order Kickstart A Business: Track Your Packages Life Hacks: Brain Game Life Hacks: Break Dance Life Hacks: Repeat 5 Times Life Hacks: Repeat 5 Times Life Hacks: Wind Speed Training Trackers: Stretch with Data Training Trackers: The Obstacle Course Training Trackers: Warm-Up
CONTENT	CA.WHST.6-	Writing Standards for Literacy in Science and Technical
STANDARD / DOMAIN / PART	8.	Subjects
PERFORMANCE STANDARD / MODE		Text Types and Purposes
EXPECTATION / SUBSTRAND	WHST.6-8.1.	Write arguments focused on discipline-specific content.
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.1.a.	Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.1.b.	Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.
		<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone
FOUNDATION /	WHST.6-	Invention Squad: Super Cleanup
PROFICIENCY LEVEL		Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.
		LEGO® Education SPIKE™ Prime Invention Squad: Broken Invention Squad: Design for Someone
FOUNDATION /	WHST.6-	Invention Squad: Super Cleanup  Establish and maintain a formal style.
PROFICIENCY LEVEL	8.1.d.	<u>LEGO® Education SPIKE™ Prime</u> Invention Squad: Broken Invention Squad: Design for Someone
FOUNDATION /	WHST.6-	Invention Squad: Super Cleanup Provide a concluding statement or section that follows from
PROFICIENCY LEVEL		and supports the argument presented.
		LEGO® Education SPIKE™ Prime Extra Resources: What is this? Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
CONTENT	CA.WHST.6-	Life Hacks: Veggie Love Writing Standards for Literacy in Science and Technical
STANDARD / DOMAIN / PART	8.	Subjects

PERFORMANCE STANDARD / MODE		Text Types and Purposes
EXPECTATION / SUBSTRAND	WHST.6-8.2.	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.2.a.	Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
		LEGO® Education SPIKE™ Prime Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.2.b.	Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
		LEGO® Education SPIKE™ Prime Invention Squad: Broken Invention Squad: Design for Someone Invention Squad: Super Cleanup
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.2.d.	Use precise language and domain-specific vocabulary to inform about or explain the topic.
		LEGO® Education SPIKE™ Prime Competition Ready: Assembling an Advanced Driving Base Competition Ready: Mission Ready Competition Ready: My Code, Our Program Competition Ready: The Guided Mission Competition Ready: Time for an Upgrade Competition Ready: Training Camp 1: Driving Around Competition Ready: Training Camp 2: Playing with Objects Competition Ready: Training Camp 3: Reacting to Lines Kickstart A Business: Automate It! Kickstart A Business: Keep It Really Safe! Kickstart A Business: Keep It Safe Kickstart A Business: Out of Order Kickstart A Business: Track Your Packages Training Trackers: Stretch with Data Training Trackers: The Obstacle Course Training Trackers: Warm-Up
FOUNDATION / PROFICIENCY LEVEL	WHST.6- 8.2.f.	Provide a concluding statement or section that follows from and supports the information or explanation presented.
		<u>LEGO® Education SPIKE™ Prime</u> Extra Resources: What is this? Invention Squad: Broken Invention Squad: Super Cleanup Life Hacks: Veggie Love
CONTENT STANDARD / DOMAIN / PART	CA.WHST.6- 8.	Writing Standards for Literacy in Science and Technical Subjects
PERFORMANCE STANDARD / MODE		Production and Distribution of Writing
EXPECTATION / SUBSTRAND	WHST.6-8.4.	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
		LEGO® Education SPIKE™ Prime Extra Resources: What is this? Invention Squad: Broken Invention Squad: Super Cleanup Life Hacks: Veggie Love