

Exploring the Extreme			
2009 Science			
Standards			
Oregon Science			
Grade K			
Activity/Lesson	State	Standards	
Finding the Center of Gravity Using Rulers	OR	SCI.K.K.2P.1	Examine the different ways things move.
Exploring the Extreme			
2009 Science			
Standards			
Oregon Science			
Grade 1			
Activity/Lesson	State	Standards	
Finding the Center of Gravity Using Rulers	OR	SCI.1.1.2P.1	Describe the motion of objects when a force is applied.
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2009 Science			
Standards			
Oregon Science			
Grade 2			
Activity/Lesson	State	Standards	
Finding the Center of Gravity Using Rulers	OR	SCI.2.2.3S.2	Make predictions about living and non-living things and events in the environment based on observed patterns.
Exploring the Extreme			
2009 Science			
Standards			
Oregon Science			
Grade 3			
Activity/Lesson	State	Standards	
Finding the Center of Gravity Using Rulers	OR	SCI.3.3.2P.1	Describe how forces cause changes in an object's position, motion, and speed.
Finding the Center of Gravity Using Rulers	OR	SCI.3.3.3S.1	Plan a simple investigation based on a testable question, match measuring tools to their uses, and collect and record data from a scientific investigation.
Finding the Center of Gravity Using Plumb Lines	OR	SCI.3.3.2P.1	Describe how forces cause changes in an object's position, motion, and speed.
Finding the Center of Gravity Using Plumb Lines	OR	SCI.3.3.3S.1	Plan a simple investigation based on a testable question, match measuring tools to their uses, and collect and record data from a scientific investigation.

Changing the Center of Gravity Using Moment Arms	OR	SCI.3.3.2P.1	Describe how forces cause changes in an object's position, motion, and speed.
Changing the Center of Gravity Using Moment Arms	OR	SCI.3.3.3S.1	Plan a simple investigation based on a testable question, match measuring tools to their uses, and collect and record data from a scientific investigation.
Exploring the Extreme			
2009 Science			
Standards			
Oregon Science			
Grade 4			
Activity/Lesson	State	Standards	
Finding the Center of Gravity Using Rulers	OR	SCI.4.4.3S.1	Based on observations identify testable questions, design a scientific investigation, and collect and record data consistent with a planned scientific investigation.
Finding the Center of Gravity Using Plumb Lines	OR	SCI.4.4.3S.1	Based on observations identify testable questions, design a scientific investigation, and collect and record data consistent with a planned scientific investigation.
Changing the Center of Gravity Using Moment Arms	OR	SCI.4.4.3S.1	Based on observations identify testable questions, design a scientific investigation, and collect and record data consistent with a planned scientific investigation.
Exploring the Extreme			
2009 Science			
Standards			
Oregon Science			
Grade 5			
Activity/Lesson	State	Standards	
Jet Propulsion	OR	SCI.5.5.3S.1	Based on observations and science principles, identify questions that can be tested, design an experiment or investigation, and identify appropriate tools. Collect and record multiple observations while conducting investigations or experiments to test a scientific question or hypothesis.
Jet Propulsion	OR	SCI.5.5.3S.2	Identify patterns in data that support a reasonable explanation for the results of an investigation or experiment and communicate findings using graphs, charts, maps, models, and oral and written reports.

Vectoring	OR	SCI.5.5.3S.1	Based on observations and science principles, identify questions that can be tested, design an experiment or investigation, and identify appropriate tools. Collect and record multiple observations while conducting investigations or experiments to test a scientific question or hypothesis.
Vectoring	OR	SCI.5.5.3S.2	Identify patterns in data that support a reasonable explanation for the results of an investigation or experiment and communicate findings using graphs, charts, maps, models, and oral and written reports.

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Oregon Science			
Grade 6			
Activity/Lesson	State	Standards	
Jet Propulsion	OR	SCI.6.6.3S.1	Based on observations and science principles, propose questions or hypotheses that can be examined through scientific investigation. Design and conduct an investigation that uses appropriate tools and techniques to collect relevant data.
Jet Propulsion	OR	SCI.6.6.3S.2	Organize and display relevant data, construct an evidence-based explanation of the results of an investigation, and communicate the conclusions.
Jet Propulsion	OR	SCI.6.6.3S.3	Explain why if more than one variable changes at the same time in an investigation, the outcome of the investigation may not be clearly attributable to any one variable.
Vectoring	OR	SCI.6.6.3S.2	Organize and display relevant data, construct an evidence-based explanation of the results of an investigation, and communicate the conclusions.
Vectoring	OR	SCI.6.6.3S.3	Explain why if more than one variable changes at the same time in an investigation, the outcome of the investigation may not be clearly attributable to any one variable.

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2009 Science
Standards**

Oregon Science			
Grade 7			
Activity/Lesson	State	Standards	

Jet Propulsion	OR	SCI.7.7.2P.1	Identify and describe types of motion and forces and relate forces qualitatively to the laws of motion and gravitation.
Jet Propulsion	OR	SCI.7.7.3S.1	Based on observations and science principles, propose questions or hypotheses that can be examined through scientific investigation. Design and conduct a scientific investigation that uses appropriate tools and techniques to collect relevant data.
Vectoring	OR	SCI.7.7.2P.1	Identify and describe types of motion and forces and relate forces qualitatively to the laws of motion and gravitation.
Vectoring	OR	SCI.7.7.3S.1	Based on observations and science principles, propose questions or hypotheses that can be examined through scientific investigation. Design and conduct a scientific investigation that uses appropriate tools and techniques to collect relevant data.
Vectoring	OR	SCI.7.7.3S.2	Organize, display, and analyze relevant data, construct an evidence-based explanation of the results of an investigation, and communicate the conclusions including possible sources of error.
Center of Gravity, Pitch, Yaw	OR	SCI.7.7.2P.1	Identify and describe types of motion and forces and relate forces qualitatively to the laws of motion and gravitation.
Fuel Efficiency	OR	SCI.7.7.3S.2	Organize, display, and analyze relevant data, construct an evidence-based explanation of the results of an investigation, and communicate the conclusions including possible sources of error.
Exploring the Extreme			
2009 Science			
Standards			
Oregon Science			
Grade 8			
Activity/Lesson	State	Standards	
Jet Propulsion	OR	SCI.8.8.3S.1	Based on observations and science principles, propose questions or hypotheses that can be examined through scientific investigation. Design and conduct a scientific investigation that uses appropriate tools, techniques, independent and dependent variables, and controls to collect relevant data.

Vectoring	OR	SCI.8.8.3S.1	Based on observations and science principles, propose questions or hypotheses that can be examined through scientific investigation. Design and conduct a scientific investigation that uses appropriate tools, techniques, independent and dependent variables, and controls to collect relevant data.
Vectoring	OR	SCI.8.8.3S.2	Organize, display, and analyze relevant data, construct an evidence-based explanation of the results of a scientific investigation, and communicate the conclusions including possible sources of error. Suggest new investigations based on analysis of results.