

<b>Exploring the Extreme</b>			
<b>1997 Science</b>			
<b>Learning Standards</b>			
<b>Illinois Science</b>			
<b>Grades K-3</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Finding the Center of Gravity Using Rulers	IL	SCI.K-3.11.A.1b	Develop questions on scientific topics.
Finding the Center of Gravity Using Rulers	IL	SCI.K-3.12.D.1a	Identify examples of motion (e.g., moving in a straight line, vibrating, rotating).
Finding the Center of Gravity Using Plumb Lines	IL	SCI.K-3.11.A.1b	Develop questions on scientific topics.
Finding the Center of Gravity Using Plumb Lines	IL	SCI.K-3.12.D.1a	Identify examples of motion (e.g., moving in a straight line, vibrating, rotating).
Changing the Center of Gravity Using Moment Arms	IL	SCI.K-3.11.A.1b	Develop questions on scientific topics.
Changing the Center of Gravity Using Moment Arms	IL	SCI.K-3.11.A.1c	Collect data for investigations using measuring instruments and technologies.
Changing the Center of Gravity Using Moment Arms	IL	SCI.K-3.12.D.1a	Identify examples of motion (e.g., moving in a straight line, vibrating, rotating).
<b>Exploring the Extreme</b>			
<b>1997 Science</b>			
<b>Learning Standards</b>			
<b>Illinois Science</b>			
<b>Grades 4-5</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Finding the Center of Gravity Using Rulers	IL	SCI.4-5.11.A.2a	Formulate questions on a specific science topic and choose the steps needed to answer the questions.
Finding the Center of Gravity Using Rulers	IL	SCI.4-5.11.A.2b	Collect data for investigations using scientific process skills including observing, estimating and measuring.
Finding the Center of Gravity Using Plumb Lines	IL	SCI.4-5.11.A.2a	Formulate questions on a specific science topic and choose the steps needed to answer the questions.
Changing the Center of Gravity Using Moment Arms	IL	SCI.4-5.11.A.2a	Formulate questions on a specific science topic and choose the steps needed to answer the questions.
Changing the Center of Gravity Using Moment Arms	IL	SCI.4-5.11.A.2b	Collect data for investigations using scientific process skills including observing, estimating and measuring.
Changing the Center of Gravity Using Moment Arms	IL	SCI.4-5.11.A.2e	Report and display the results of individual and group investigations.

Jet Propulsion	IL	SCI.4-5.11.A.2b	Collect data for investigations using scientific process skills including observing, estimating and measuring.
Vectoring	IL	SCI.4-5.11.A.2e	Report and display the results of individual and group investigations.
Center of Gravity, Pitch, Yaw	IL	SCI.4-5.11.B.2c	Build a prototype of the design using available tools and materials.
<b>Exploring the Extreme</b>			
<b>1997 Science</b>			
<b>Learning Standards</b>			
<b>Illinois Science</b>			
<b>Grades 6-8</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Jet Propulsion	IL	SCI.6-8.11.A.3b	Conduct scientific experiments that control all but one variable.
Jet Propulsion	IL	SCI.6-8.11.A.3c	Collect and record data accurately using consistent measuring and recording techniques and media.
Vectoring	IL	SCI.6-8.11.B.3c	Select the most appropriate design and build a prototype or simulation.
Center of Gravity, Pitch, Yaw	IL	SCI.6-8.11.A.3e	Use data manipulation tools and quantitative (e.g., mean, mode, simple equations) and representational methods (e.g., simulations, image processing) to analyze measurements.
Center of Gravity, Pitch, Yaw	IL	SCI.6-8.11.B.3c	Select the most appropriate design and build a prototype or simulation.
Fuel Efficiency	IL	SCI.6-8.11.A.3e	Use data manipulation tools and quantitative (e.g., mean, mode, simple equations) and representational methods (e.g., simulations, image processing) to analyze measurements.