

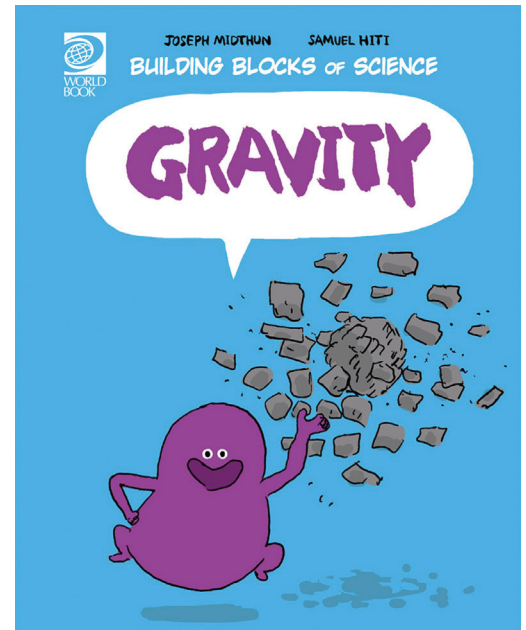
## BUILDING BLOCKS OF SCIENCE

# SCIENCE

## PHYSICAL SCIENCE

### LESSON PLAN & GUIDED DISCUSSION

Each of the 10 *Building Blocks of Science* volumes features a whimsical character which guides the reader through a physical science topic. This series is perfect for students across a spectrum of reading comprehension and science mastery levels.



\* Technology recommended for this activity \*

General Information	
<b>Title:</b>	A Day Without Gravity
<b>Materials:</b>	<ul style="list-style-type: none"> <li>• Computer (optional)</li> </ul> <b>If not using computer:</b> <ul style="list-style-type: none"> <li>• Pens or pencils</li> <li>• Paper</li> </ul>
<b>Objective:</b>	Each student will write an imaginary newscast about a morning in their hometown without gravity. The exercise will give students an opportunity to be creative, while also demonstrating their understanding of the concepts of gravity, weight vs. mass, friction, inertia, etc.

Lesson	
<p><b>Procedure</b></p>	<p>Instruct students to write an imaginary news broadcast from a local television station about a sudden emergency “weather” situation where gravity has disappeared.</p> <p>Ask them to consider the effect gravity has on falling objects, the relationship between mass and gravity, the idea that weight is the measure of the pull of gravity on an object, how inertia works, how gravity interacts with the tides in the ocean, and, most importantly, what would happen if there were no gravity or if there was less gravity.</p> <p>The newscast should take approximately 30 seconds to read. Give each student an opportunity to perform the newscast for the class.</p>
<p><b>Vocabulary for the Word Wall:</b></p>	<p>As a class, decide on a few vocabulary words that were particularly relevant to this activity. For example,</p> <ul style="list-style-type: none"> <li>• newtons</li> <li>• orbit</li> <li>• solar system</li> <li>• universe</li> </ul> <p>Pass out a few index cards and ask students to write the vocabulary word on the front of the card and its definition on the back. Students can refer to the glossary on p. 30 as a reference. There are probably not enough words for everyone in the class to make a card so just be mindful that each kid gets a turn at some point during this unit.</p> <p>Post the cards on a “WORD WALL” bulletin board in your classroom.</p>

Common Core Standards highlighted in this lesson

Standards:

**ELACC4RI3**

Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

**ELACC4RI7**

Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

**ELACC4W3**

Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

**ELACC4W7**

Conduct short research projects that build knowledge through investigation of different aspects of a topic.

**ELACC4W9**

Draw evidence from literary or informational texts to support analysis, reflection, and research.