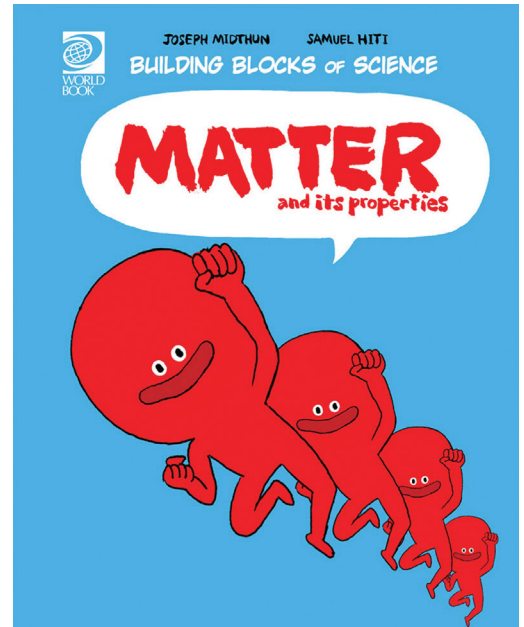


# BUILDING BLOCKS OF SCIENCE

## 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.



General Information	
<b>Title:</b>	What's the Matter?
<b>Materials:</b>	<ul style="list-style-type: none"> <li>• Selection of miscellaneous objects representing different properties of matter. If possible, choose at least one or two things that are a liquid or gas, e.g., water bottle, helium balloon.</li> <li>• Two dozen pictures of objects cut out from magazines. These images should represent a wide variety of different properties of matter.</li> <li>• Container</li> <li>• Sticky notes</li> <li>• Pens or pencils</li> </ul>
<b>Objective:</b>	Students will evaluate some real objects to determine their properties. They will demonstrate their understanding of matter and the properties of matter through a group discussion and then through individual presentations.

<b>Lesson</b>	
<b>Group discussion questions:</b>	<p>Make sure your students have grasped the major concepts of this lesson through an informal group discussion. This is an opportunity for you to highlight the most important points in the book and to clarify any uncertainties your students may have. Use the questions below as a guideline but feel free to generate your own!</p> <ul style="list-style-type: none"> <li>• What kinds of things are made of matter?</li> <li>• Can you name some properties of matter that are visible? What about invisible?</li> <li>• Tell me something about the states of matter.</li> <li>• Which are better conductors of electricity? Metals or nonmetals? Why is that?</li> </ul>
<b>Procedure</b>	<p>Gather around the table where you have laid out some objects you will be using today to start a discussion about the properties of matter.</p> <p>Have kids look at the selection of objects you have provided. As a group, talk about their properties. Be sure to use vocabulary from the lesson.</p> <p>Now kids can work independently. Have each student pick an image out of the container.</p> <p>They should use the sticky notes to record words describing the properties of their object. Remind them to consider the measurements (mass, volume, density) and the properties of matter (shape, size, texture, color, feel, taste, smell) of their item.</p> <p>Once they have finished, have them return to select one more image from the container.</p> <p>They should use the sticky notes again to write out words describing the properties of their item. This time, they should focus on comparing the properties of their two items.</p> <p>Once everyone has finished, go around the room and give each child an opportunity to compare their two items out loud.</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>• <b>compound</b></li> <li>• <b>element</b></li> <li>• <b>expand</b></li> <li>• <b>atom</b></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>
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**Common Core Standards highlighted in this lesson**

<p><b>Standards:</b></p>	<p><b>ELACC4RI1</b> Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p><b>ELACC4RI2</b> Determine the main idea of a text and explain how it is supported by key details; summarize the text.</p> <p><b>ELACC4RI4</b> Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.</p> <p><b>ELACC4RI7</b> 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.</p> <p><b>ELACC4W 9</b> Draw evidence from literary or informational texts to support analysis, reflection, and research.</p>
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