

Activity Title:	Create a Noise Maker Out of a Box
Timeframe:	~40 Minutes
Big Ideas and/or Essential Questions:	<ul style="list-style-type: none"> <li>● <b>Essential Question</b>-How can I make a loud noise maker?</li> <li>● <b>Key Vocabulary</b>- noise maker, engineering, explore, design, create, improve, materials</li> </ul>
PA Standards:	<ul style="list-style-type: none"> <li>● Next Generation Science Standards Practices</li> <li>● -Asking Questions</li> <li>● -Planning and carrying out investigations</li> <li>● -Constructing explanations and designing solutions</li> </ul>
Learning Target(s):	<ul style="list-style-type: none"> <li>- I can use materials to create a loud and quiet noise maker.</li> </ul>
Materials:	<ul style="list-style-type: none"> <li>-<i>Not a Box</i> by Antoinette Portis</li> <li>-Simplified Engineering and Design Poster</li> <li>-example of a party noise maker</li> <li>-boxes with lids (jewelry size)</li> <li>-thick rubber bands to keep the box closed</li> <li>-Materials for the children to choose from to create the loudest noise maker pom poms, buttons, foam shapes, paperclips, marbles, washers, dice, small paper squares etc.</li> </ul>
Activity Procedures:	<ol style="list-style-type: none"> <li>1. Hold up a box and ask the children what it is. When they say it's a box pose the question...What else could it be?" Except all answers. Introduce the word <b>creativity</b>.</li> <li>2. Teacher reads <i>Not a Box</i> by Antoinette Portis</li> </ol>

	<p>3. After reading the book explain that today we will be exploring how to turn a box into a noise maker. We will be <b>engineers</b> when we <b>design</b> our <b>noise makers</b>. We will be using our <b>creativity</b> when choosing different <b>materials</b>.</p> <p>4. Split students into small groups 3-4 students per group. Students will be doing away from teacher activities until they are called by the classroom teacher to create their noise makers.</p> <p>5. The classroom teacher will each take a small group of students to create their noise makers. It is very important that each child tries to <b>improve</b> their noise maker to make it louder. Compare and contrast noise makers in the group. Ask why one noise maker is louder than the other.</p> <p>6. Students will rotate through activities while they are waiting to be called to the noise maker stations.</p>
Assessments:	<p>Bring the students back together on the carpet. Ask: How did you improve your noise maker to make it louder?</p> <p>Think about how you could use your creativity to make your box into something totally different.</p>



