

Activity Title:	Kindergarten Engineering/Mighty Mighty Construction Site
Timeframe:	~ 2 day 40 Minutes per day
Big Ideas and/or Essential Questions:	<p>How can I build a structure with a team of engineers?</p> <p>Key Vocabulary-engineering, plans, construction, building, teamwork/collaboration</p>
PA Standards:	<p>Next Generation Science Standards</p> <p>Planning and carrying out investigations</p> <p>Constructing explanations and designing solutions</p>
Learning Target(s):	<ul style="list-style-type: none"> - I can work on a team to build a structure with four walls, one door, and some type of roof.
Materials:	<p>A large E to represent the word Engineering</p> <p><i>Mighty, Mighty Construction Site</i> book by Sherri Duskey Rinker</p> <p>A bag containing artifacts that represent engineering such as plans, hard hat, picture of a construction site, truck, civil engineer photo.</p> <p>Blocks for building (various different types legos, building blocks,)</p> <p>Simplified Engineering and Design Process posters</p> <p>(Explore, Create, Improve)</p> <p>http://blog.eie.org/creating-an-engineering-design-process-for-the-preschool-classroom</p>
Activity Procedures:	<p>Day 1</p> <ol style="list-style-type: none"> 1. Read/Think aloud the book <u>Mighty Construction Site</u>. 2. Introduce the letter E-Explain that letter starts with an E. Today we will be learning about being an engineer. 3. Pull out the bag with engineering artifacts. Invite one student at a time to pull out an object from the bag and

	<p>discuss (Construction hat, plans, construction trucks, tools ...)</p> <p>4. Pass the objects around to all the children.</p> <p>Share the Construction ABC Song</p> <p>https://www.youtube.com/watch?v=Zrrt0fxn7AE</p> <p>Day 2</p> <p>1. Share the Engineering and Design Simplified Version-Explore, Create, Improve eie poster.</p> <p>http://blog.eie.org/creating-an-engineering-design-process-for-the-preschool-classroom</p> <p>2. . Review Key Vocabulary</p> <p>3. Task/Challenge-Today you will be pretending that you are an engineer at a construction site. You will be working with a team to create a brand new building at your construction site. Your building must have four walls, a door, and some type of roof to provide shelter.</p> <p>4. Share the building materials with the students.</p> <p>Other ideas for Kindergarten Engineering-Try the same engineering and design challenge but give the groups different building materials. Also change the construction site to either a dog kennel or a zoo. The dog kennel should have some type of roof, a fence, and the dog should be standing upright.</p>
Assessments:	<p>Reflection Questions-How did you team work together?</p> <p>Did your structure have four walls, a door, and a roof?</p>

