








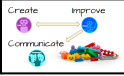




# UTK Unit 4 We Are Engineers!

## Lesson 7

 <b>Phenomenon:</b> Engineers use a Design Thinking Process to solve problems.	 <b>Question to Investigate:</b> How can we keep Humpty Dumpty safe?	 <b>Lesson Objective:</b> Students create and improve a wall (or other idea) to keep Humpty Dumpty safe.
<div style="display: flex; justify-content: space-between; align-items: center;">  <b>Success Criteria:</b> I can design solutions to problems.            </div>		

Launch	
	<b>OK Engineers, Let's get our brains ready to think like an engineer. As we watch this video, think back to what we learned already about engineering and ask yourself: What is an engineer?.</b> Play the video: What's an Engineer by Crash Course Kids.
	<b>Humpty Dumpty needs the help of our UTK Engineers. Let's read the nursery rhyme again to remember the problem.</b>
	<b>Our question to investigate is: How can we keep Humpty Dumpty safe on the wall?</b>
	<b>You came up with some great ideas to help Humpty Dumpty stay safe. During our last STEAM time, we drew them here on our Engineering Design Process</b> (reference the work from the previous lesson)  <b>Now we are going to create our ideas.</b>
Explore	
	<b>It's time to CREATE, IMPROVE, and COMMUNICATE your ideas.</b> Give students options for materials to create their designs. Materials may include: Lego bricks, blocks, snap cubes, construction paper, recycled materials, magnet shapes, or other materials you have available in your classroom.  <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%;">         Note: Students use their Humpty Dumpty model made in lesson 6 to test their wall.       </div>
	<b>Now we are going to have a chance to explore as we practice our Habit of Mind of Striving for Accuracy.</b> Show <a href="#">HOM #6</a> I can do my best!
	<b>I will be taking some pictures of your creations today to help us remember what we have created today.</b>
Reflect	

	<p><b><i>Which solutions worked best to keep Humpty Dumpty safe?</i></b></p>
	<p><b>The Wall in the Middle of the Book</b>  This is a fun book with a wall, an ogre, and a knight. Enjoy! This link is on <a href="#">Vooks</a>, which is animated; this link is on <a href="#">YouTube</a>. Vooks is an awesome free site, but you need to create a login.</p>