

# UTK Unit 4 We Are Engineers!

## Lesson 21

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|  <b>Phenomenon:</b><br>Engineers create things to solve problems.                                                                                                                                                                                           |  <b>Question to Investigate:</b> What problems do you see in the world? |  <b>Lesson Objective:</b> Students communicate their solution to the problem by presenting to a group. |
| <div style="display: flex; justify-content: space-between; align-items: center;">  <b>Success Criteria:</b> I can communicate my solution with others.            </div> |                                                                                                                                                          |                                                                                                                                                                                         |

| Launch                                                                              |                                                                                                                                                                                                                                             |
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|    | <b>Our unit, We Are Engineers!, is coming to an end. We can use what we have learned to continue to help the world.</b>                                                                                                                     |
|    | <b>Let's think back on our learning and our Essential Question: How do engineers help the world?</b>                                                                                                                                        |
|   | <b>Now we are going to have a chance to discover as we practice our Habit of Mind of applying past knowledge to new situations. Show <a href="#">HOM #8</a> I can use what I learned!</b>                                                   |
|  | <b>This is a video called How to be an inventor by Kid President. He gets to meet real engineers who help the world. As we watch, think about our Essential Question: How do engineers help the world?</b>                                  |
|  | <b>How do engineers help the world? You are also an engineer, what can we all do to help the world like an engineer? Chart student responses.</b>                                                                                           |
|  | <b>Let's all take one minute to move around the room in whatever way we would like to move. For a structured Brain Break, try "<a href="#">Wiggle It, Wiggle It.</a>"</b>                                                                   |
| Explore                                                                             |                                                                                                                                                                                                                                             |
|  | <b>It is time for each group to share their solutions for Harry the Puffball. Let's talk about our role as presenters and audience members.</b>                                                                                             |
|  | <b>Your presentation will have three parts:</b> <ol style="list-style-type: none"> <li>1) <b>What is the problem?</b></li> <li>2) <b>How did your team solve the problem?</b></li> <li>3) <b>Why is it important?</b></li> </ol>            |
|  | <b>As the audience, you also have an important role. You have three jobs:</b> <ol style="list-style-type: none"> <li>1) <b>Look at the speaker.</b></li> <li>2) <b>Listen with your whole body.</b></li> <li>3) <b>Give kind</b></li> </ol> |

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|  | <p><b>You worked together to create a solution for Harry the Puffball. Now it is time to share your creation with others. When you share, say, “We created _____ for Harry the Puffball because _____.” Make sure you look at the audience and use your “speaker” voice.</b></p> <p><b>If you are the audience, you are going to use your ears and your whole body to listen to the speakers. Remember to include the three parts: 1. What is the problem? 2. How did your team solve the problem? 3. Why is it important?</b> Have each group share their solution with the class first, then share with families or other classrooms. You may need to take more than one session to share presentations, do what works for your students’ attention span and stamina.</p> |
| <b>Reflect</b>                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|  | <p><b>How did you communicate your problem to the world?</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|  | <p><b>How can you help the world like an engineer? You can continue imagining, planning, and creating solutions to problems. Let’s read this book about two girls who are <a href="#">Boxitects</a>, they engineer solutions with cardboard boxes! How will you keep creating solutions to problems?</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|  | <p><b>You are all amazing engineers. You have earned your own Harry the Puffball so that you can continue to create solutions to problems that help the world.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |