Kindergarten

Unit # – Unit Title

Text Connections: *Title* by Author

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| Design Challenge Summary |
| Challenge: What will the students be required to do? |
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| Standards: What standards are addressed? |
| Science:  NS.1.K.1 Record observations pictorially, orally, and in writing  NS.1.K.2 Ask questions based on observations  NS.1.K.3 Conduct scientific investigations as a class and in teams  NS.1.K.4 Estimate and Measure length…using non-standard units  NS.1.K.5 Estimate relative *temperature* of matter (e.g., objects, living things, earth materials)  NS.1.K.6 Collect empirical evidence as a class  NS.1.K.7 Use age-appropriate equipment and tools in scientific investigations  NS.1.K.8 Apply appropriate rules of safety related to daily activities  NS.1.K.9 Apply lap safety rules as they relate to specific science lab activities  Math:  Mathematical Practice Standards  K.CC.1 Count to 100 by ones and by tens  ELA:  W.K.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.  W.K.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.  SL.K.1 Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups  SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood  SL.K.6 Speak audibly and express thoughts, feelings, and ideas clearly. |
| Result: What will students know, value, and be able to do as a result of the lesson? What’s the big idea? |
| Know and apply the engineering design loop process. |
| Assessment: What evidence will be used to determine student learning? |
| Did they (what the challenge required)?  Did they follow the design loop process?  Did they work collaboratively? |
| Prior Knowledge/Experiences: What prior content knowledge and skills will the students need? |
| Experiences with the Engineering Design Loop Process  Connections to the Mathematical Practices  Investigations/inquiry in Science  Experiences with |
| Summary/Connections: How will this design challenge connect with new/future learning, other content areas, real world experiences, etc.? |
| This lesson will help students develop problem solving skills and collaboration skills that are essential in succeeding in the 21st century. It will allow student the opportunity to transfer and apply skills from various content areas within one task.  As a summary activity, you could engage students in: W.K.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.  Extensions: |
| Materials/Equipment/Preparation: What materials and equipment will students need to successfully complete this design challenge? |
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**ADDITIONAL INFORMATION**