3rd Grade

Unit # – Unit Title

Text Connection: *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.1.3.1 Communicate observations orally, in writing, and in graphic organizers  NS.1.3.2 Develop questions that guide scientific inquiry  NS.1.3.3 Conduct scientific investigations individually and in teams  NS.1.3.4 Communicate the results of scientific investigations  NS.1.3.5 Estimate and measure length, mass, temperature, and elapsed time  NS.1.3.6 Collect and analyze measurable empirical evidence as a team and/or as individuals  NS.1.3.7 Make and explain predictions based on prior knowledge  NS.1.3.8 Use simple equipment, age appropriate tools, technology, and mathematics in scientific investigations  NS.1.3.9 Apply lap safety rules as they relate to specific science lab activities  Math:  Mathematical Practice Standards  ELA:  W.3.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.  W.3.10 Write routinely over extended time frames and short time frames for a range of discipline-specific tasks, purposes, and audiences.  SL.3.1 Engage effectively in a range of collaborative discussions with diverse partners on grade 3 topics and texts, building on others’ ideas and expressing their own clearly.  SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.  SL.3.4 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.  SL.3.6 Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. |
| 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. |
| 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? |
| Experience 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 students the opportunity to transfer and apply skills from various content areas within one task.  Extension: |
| Materials/Equipment/Preparation: What materials and equipment will students need to successfully complete this design challenge? |
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**Additional Information**