2nd 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.1.2.1 Communicate observations orally, in writing and in graphic organizersNS.1.2.2 Develop questions that guide scientific inquiryNS.1.2.3 Conduct scientific investigations as individually and in teamsNS.1.2.4 Estimate and measure length… NS.1.2.5 Collect measurable empirical evidence in teams and as individualsNS.1.2.6 Make predictions in teams and as individuals based upon empirical evidenceNS.1.2.7 Use age-appropriate equipment and tools in scientific investigationsNS.1.2.8 Apply lap safety rules as they relate to specific science lab activitiesMath:Mathematical Practice StandardsOther:W.2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points and provide a concluding statement or sectionW.2.3 Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts and feelings, use temporal words to signal event order, and provide a sense of closureW.2.7 Participate in shared research and writing projectsSL.2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groupsSL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information or deepen understanding of a topic or issueSL.2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentencesSL.2.6 Produce 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 process.Demonstrate ability to modify designs based on observations and predictions.Work collaboratively on solving a problem. |
| 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 processConnections to the Mathematical PracticesInvestigations/inquiry in ScienceExperiences 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.2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points and provide a concluding statement or sectionW.2.3 Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts and feelings, use temporal words to signal event order, and provide a sense of closureExtensions: |
| Materials/Equipment/Preparation: What materials and equipment will students need to successfully complete this design challenge?  |
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**ADDITIONAL INFORMATION**