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| **Unit Information** | | | |
| **Unit Theme: Unit 5**  **Adventures** | **\*\*These are the titles used from Reading Street Unit 5: *The Skunk Ladder, The Wreck of the R.M.S Titanic, Talk with an Astronaut*.** | **Grade**  **Level:** | **5** |
| **Integrated Subject/Topic:** | **English Language Arts / Science / Social Studies** | | |
| **Length (in weeks/days):**  **1st 2nd 3rd 4th** | **6 weeks** | | |
| **Developers:** | **RES** | | |

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| **What’s The Big Idea (s)?** | | | | | |
| W.5.3 I can use many details in writing about adventure to entertain my audience.  5.P.1.1 I can explain the different forces acting on my body at the different stages of the ride.  5.P.1.3 I can use graphs to explain the different forces and motion.  RL.5.2 I can determine the themes and discuss the characters while summarizing the text.  L.5.4 I can use different strategies to learn new vocabulary and understand the text better. | | | | | |
| **Essential Questions** | | | | | |
| W.5.3 Why is it important to use details to describe your adventure?  5.P.1.1 Why does your body feel different sensations on different parts of a roller coaster?  5.P.1.3 How can graphic sources help me to explain force and motion?  RL.5.2 How can understanding ther themes and characters help in summarizing the text?  L.5.4 Why is it important to have strategies to help figure out words we don’t know? | | | | | |
| **Priority Standards** | | | **Supporting Standards** | | |
| RL5.2-I can **determine** the theme, summarize the text, and explain character actions.  W5.3-I can affectively **write** a narrative piece using descriptive details in sequential order.  L5.4-I can **use** a variety of **strategies** to **determine** the meaning of unfamiliar words.  5.P.1-I can **explain** force, motion and the relationship between them.  5.P.1.1-I can **explain** how factors such as gravity, friction and change in mass affect the motion of objects.  5.P.1.3-I can **illustrate** the motion of an object using a graph to show a change in position over a period of time. | | | RL5.3-I can **compare and contrast** characters, settings, or events with specific details.  W5.6-I can **use technology** and the writing process to type of minimum of two pages.  L.5.6-I can **acquire** and use accurately fifth grade words in all subjects. | | |
| **Possible Minilessons Statements** | | | | | |
| Stories from Reading Street: *The Skunk Ladder*-discuss how can we find adventure in ordinary life? Use leveled reader: *An Adventure with Simple Machines* after reading, show a box of random simple machines and they pick one and write about an adventure with it.  *The Wreck of the R.M.S. Titanic*- discuss potential and kinetic energy. Research how fast boats go, big and small and discuss speed, inertia, and acceleration. \*\*Begin roller coaster project\*\*  *Talk with an Astronaut*- discuss gravity, mass and weight. Conduct experiments of how fast objects drop and discuss why. Show videos of Newton’s 3 Laws and create their own demonstrations of the three laws.  Watch Rube Goldberg videos and discuss deceleration, acceleration, position, level, fulcrum, simple machine, reaction and gravity. Students create their own simple machine with objects from home.  With each story the students need to discuss theme, compare and contrast characters or concepts and use specific details with the chapter book(s) from Resources available to your room.  Use ReadWriteThink compare/contrast graphic organizer to begin final product of comparing and contrasting their roller coaster with another group’s roller coaster model.  Use fcrr.org or <https://www.zaner-bloser.com/media/zb/zaner-bloser/WW_Teacher8.pdf> vocabulary activities and graphic organizers to provide examples on how to find the meaning of unknown words. | | | | | |
| **Possible I Can Statements** | | | | | |
| 5.P.1.1/3-I can **explain** how graphing, friction and mass affect motion. I can **illustrate** motion and change over a period of time.  RL5.2/3-I can **determine the theme** and **compare and contrast** characters with specific details.  W.5.3/6-I can **use technology** to **write** descriptive details and sequence events.  L.5.4/6-I can **use** a variety of **strategies** to **determine** the **meaning** of unfamiliar words of all subjects. | | | | | |
| **Problem-Based / Hands-On Learning Activities** | | | | | |
| Learning Tasks: You are a roller coaster engineer working for a new company. They want you to design a new roller coaster for Busch Gardens. You will present your roller coaster to the executives at the park. Your presentation must include a graphic picture of the roller coaster and formal knowledge of force and motion. While describing the twists and turns. You hope your presentation will be enough for them to build your roller coaster in the park.  TASK 1: Internet search for vocabulary  TASK 2: Draw graph and diagram of a roller coaster and explain what is happening at the different sections. Use the vocabulary you found in task 1 (use website to test roller coaster after you make it.)  EC: Use the computer first to design the roller coaster then draw.  AIG: Give certain qualifications that roller coasters must have.  TASK 3: Create a narrative about someone in a park taking a ride on your roller coaster. Use descriptive details to tell how that person would be feeling along the way.  EC: One paragraph at a time and teacher check after each one.  Tier 1: Peer check, teacher check at the end  AIG: Type on computers and add images.  TASK 4: Present your roller coaster, graphic source and summary of Task 3 to the teacher.  EC: On poster board mainly tell about the picture.  AIG: Grade other classes work on a scale. Must include a power point in their work. | | | | | |
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| Science: deceleration, velocity, acceleration, speed, inertia, friction, position, force, lever, balanced forces, fulcrum, simple machine, reaction, work, unbalanced force, effort arm, resistance arm, action, gravity, resistance, potential energy, kinetic energy, Newton’s 3 Laws | | ELA: Adjectives, Adverbs, Graphic Sources, Vocabulary from: *The fabulous perpetual motion machine, The unsinkable Titanic* (Reading Street Unit 3 and 5) | | |  |
| **Resources** | | | | | |
| Chapter Books: The Borrowers, Journey to the Center of the Earth, Swiss Family Robinson, How to Dig a Hole to the Other Side of the World  AIG: Swiss Family Robinson  Tier 1: How to Dig a Hole to the other side of the World  EC: Leveled books from Reading Street  Online Info: Rube Goldberg on FCS Tube, <http://www.msichicago.org/online-science/simple-machines/activities/simple-machines-1/> , <http://edheads.org/activities/simple-machines/> , <http://dsc.discovery.com/games/coasters/interactive.html> , <http://www.readwritethink.org/files/resources/interactives/compcontrast/map.html> , Teacher Tube->School House Rock -> unpack your adjectives, <http://www.readwritethink.org/classroom-resources/lesson-plans/flip-chip-examining-affixes-253.html> , fcrr.org -> 4-5 ->vocabulary building, <https://www.zaner-bloser.com/media/zb/zaner-bloser/WW_Teacher8.pdf> | | | | | |
| **Achievement Targets- Assessment**  **What are the tasks implied by the verbs in the standards? What will the student be able to do?** | | | | | |
| **Diagnostic** | **Informal** | | | **Formal** | |
| Pre-Assessment:  1. Tell me anything you know about how things move.  2. How would you explain to another student how to compare and contrast two things with lots of details.  3. When you’re taking an adventure in a new book, what strategies would you use to figure out new words? | The teacher can check brain storming maps before they write.  Keep anecdotal notes of student progress and during group conversation.  Class discussions about theme.  Class discussion about sequential order.  Think/Pair/Share on stories.  Check comprehension using Reading Street questions or end of chapter questions.  Activities on how things move | | | Post-Assessment:  1. Write/Type a narrative with descriptive details about an adventure on a roller coaster including at least 10 force and motion terms from the word bank.  2. Use vocabulary that we have learned to describe how objects move from point A to point B. (Give word bank and picture)  3. Compare and contrast two different roller coasters that the class presented using details and fifth grade science vocabulary from the word bank.  4. Use one of the books read in class for reference: use strategies to figure out 10 unknown words and tell me the strategy that you used. (Allow students to access the book during assessment)  \*\*\*Prior to assessments, go to Rubistar.com and create rubrics for grading. | |

\*\*\*Create rubric for Tasks.\*\*\*