UNIT PLANNING OVERVIEW FOR QUARTER: 1 – Science AMPLIFY

**COMPLETE WITH HOME CONNECTION**

**Teacher Name: Gant, Wengren**

**Grade Level: 3**

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| **Subject: Science**    **Topic Description: Balancing Forces** | |
| **STAGE 1** | **DESIRED RESULTS** |
| **Established Goals** | * Understand how to collect data * Identify types of forces * Identify patterns of magnetic forces * Investigate gravity of forces * Analyze and diagram forces * Investigate how forces balance * Compare balanced and unbalanced forces * Use the scientific thinking processes to conduct investigations and build results * Communicate results of investigations through written word and diagrams |
| **Essential Questions** | * What makes an object move? * How can a force act without objects touching? * In what ways can magnetic forces make an object move? * What makes an object fall? * Why would an object not move even if a force is acting on it? * What can make forces not be balanced anymore? * What makes an object start to move? * How can a force act without objects touching it? * In what ways can magnetic forces make an object move? |
| Students will know… | **Vocabulary**: force, investigate, investigation, observation, observe, evidence, attract, magnet, magnetic force, model, non-touching force, repel, touching force, diagram, explanation, gravity, balanced forces, exert, |
| Students will be able to… | * Plan and conduct investigations, * Analyze patterns in data (patterns) * Obtain information about magnetic force, gravity, and balanced and unbalanced forces. * Write explanations and create physical models and diagram models to show why the train’s vertical motion is stable at times and changes at times (stability and change). |
| **STAGE 2** | **ASSESSMENT EVIDENCE** |
| **Performance Tasks** | * Investigations/Activities * Investigation Notebook * Quizzes/Assessments |
| **Other Evidence** | * Teacher observations * Exit slips * Self Reflection * On-the-Fly Assessment |
| **STAGE 3** | **HOME/SCHOOL CONNECTION** |
| **Learning Activities** | * Use magnets on the refrigerator to see how they attract and repel * Trying moving object by pushing and pulling using different forces * Discuss essential questions with students. |