1. **Table 2: *Stage One***

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| **Stage 1 Desired Results** | | |
| ESTABLISHED GOALS - #1  (Standards- numbered and unpacked)    **K-PS2-1.**  **Compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.** [Clarification Statement: Examples of pushes or pulls could include a string attached to an object being pulled, a person pushing an object, a person stopping a rolling ball, and two objects colliding and pushing on each other.] [Assessment Boundary: Assessment is limited to different relative strengths or different directions, but not both at the same time. Assessment does not include non-contact pushes or pulls such as those produced by magnets.] | ***Transfer*** | |
| *Students will be able to independently use their learning to* | |
| ***Meaning*** | |
| UNDERSTANDINGS  *Students will understand that…*   1. A force can cause or stop motion 2. Force needs to be applied on order for an object to move 3. Students will know that strength and direction will affect the motion of an object. | ESSENTIAL QUESTIONS  *Students will keep considering…*   1. How do objects move? |
| ***Acquisition*** | |
| KNOWLEDGE  *Students will know…*   1. A bigger push or pull makes things speed up or slow down more quickly 2. When objects touch or collide, they push one another and can change motion.   Vocabulary: force, motion, push, pull, strength, direction | Science Practice)   1. Asking questions (for science) and defining problems (for engineering) 2. Developing and using models 3. Planning and carrying out investigations 4. Analyzing and interpreting data 5. Using mathematics and computational thinking 6. Constructing explanations (for science) and designing solutions (for engineering) 7. Engaging in argument from evidence 8. Obtaining, evaluating, and communicating information |

**Table 3: *Stage Two***

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| **Stage 2 – Evidence** | | |
| **Coding** | **Evaluative Criteria** | **Assessment Evidence** |
|  |  | PERFORMANCE TASK(S):  Set up different ramps (different inclines).  Have students make predictions about which ramp the object (car) would make the car go the furthest. Will pushing the car change the distance? What happens if two cars collide? |
|  |  | Suggested Resources: |