Student Name \_\_\_\_\_

Homeroom Teacher\_\_\_\_\_

## NTI Day 21

Special Area -STEM Lab 3-5

You may access this lesson electronically from the following webpages:

Special Area - <u>http://cgesspecialarea.weebly.com/</u>

STEM Lab - <u>http://cgesstem.weebly.com/</u>

NGSS: 3-5-ETS1-1	Learning Target: I am making observations and testing ways to change the speed of an object rolling down a ramp.
Think	<ul> <li>Everybody usually has a route they take to get to their destination.</li> <li>Moving things efficiently from one point to another is a challenge that engineers have been working on for hundreds of years. Staying on the route is important for us to reach our destination safely. Think about: <ul> <li>What are some systems that are designed to move things like water, electricity, trains, etc. along a specific course?</li> </ul> </li> </ul>
Science Vocabulary	Potential energy - stored energy in an object because of its position or state Kinetic energy - energy an object has due to its motion Gravity - a force that pulls all objects down to the ground Friction - the force that slows objects down when they are touching each other
Try It	Set up a ramp and release a car or ball from the top. Observe how fast it moves down the ramp and across the floor. Try two ways to make it go slower. Think of a solution that would keep the ball/car from rolling off the side of the ramp.
Record	On the back of this paper or another piece of paper record your observations of the car/ball rolling down the ramp. You do not need to submit your observations. Save them to help with tomorrow's challenge.
Reflection	Write your answer below or on the Response Form on the Special Area webpage for NTI Day 21. How can you change the speed a car or ball rolls down the ramp? Use evidence from your observations to support your answer.