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

## NTI Day 22

## Special Area -STEM Lab K - 2nd

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: K-2-ETS1-2	Learning Tanget: Tam decigning a marble track that will let the marble
11033, K-2-E131-2	Learning Target: I am designing a marble track that will let the marble
	or small ball go from start to finish as slow as possible.
Challenge	Design a marble track that will keep the marble/small ball rolling slowly
	from the starting point until it gets to the end.
Criteria/Constraints	<ul> <li>The marble/ball should start at least 3 feet above the floor</li> </ul>
	• The marble/ball should not come off the track until it reaches the end
	<ul> <li>The track may be attached to a wall, door, chair, cardboard, cabinet,</li> </ul>
	ladder, etc. Please ask permission before you attach the track to any
	of the suggested items
	<ul> <li>The track should have at least four turns</li> </ul>
	<ul> <li>The track may be open or closed (you may cut the toilet paper/paper towel rolls in half)</li> </ul>
	<ul> <li>The track should be made of recycle materials you have home - toilet paper rolls, paper towel rolls, paper, cereal box cardboard, foil, cups,</li> </ul>
	egg cartons, pool noodles (ask permission before using them), straws,
	sticks, blocks, Legos, tape, other things you have at home
Choose one way to	• Marble track may be a drawing of your idea on the other side of this
show your design:	paper or a different piece of paper
	• Color the drawing
	• Label the drawing with the materials you would use if you were going to make the manhle track with necessary materials from home.
	make the marble track with recycled materials from home
	<ul> <li>Marble track may be a model of your idea made with recycled materials</li> </ul>
	you have at home
	<ul> <li>Remember to ask permission before taping track to the wall, door,</li> </ul>
	table, chairs, etc.
	• Test it - put a marble on the track and see if it rolls slowly to the end
Reflection	You may complete your answer to the reflection on paper or on the
	response form for NTI Day 22 on the Special Area web page.
	• If you made a drawing tell why you think the length and direction of
	your track pieces help to slow your marble down. Remember to turn in
	you drawing or upload a photo of it.
	• If you made a model tell what happened when you tested it. Tell why
	the length and direction of your track pieces helped slow your
	marble/ball down. What could you change about the track to make it
	go even slower? Why do you think that would take longer? Remember
	to upload a photo of your model.