Name: _____ DUE Date: _____

Summative 2: Investigating Mechanical Systems – Simple Machines

Overall Expectation(s): 3. Identify forces that act on and within structures and mechanisms, and describe the effects of these forces on structures and mechanisms and 2. I*nvestigate forces that act on structures and mechanisms.*

1. You will be researching one of the following **simple machines**:

	Harder	Ng
1st class Lever	Helen	Odessa
2nd class Lever	Josh	Maclaren
3rd class Lever	Shakiba	Harsath Natalie
Inclined Plane	Maryam	Vicky H Viktoria
Wheel and Axle	Nick	Sophia
Wedge	Tara	Jacob
Screw	Raj	Shakur
Pulley	Daniel	Sierra Julian

2. Required Information for your presentation:
   a. What is your **simple machine**? What is the simple machine's purpose?
   b. Identify the various **parts** of your simple machine that allow it to do its job efficiently and safely.
   c. Are there any **side effects / negatives/ disadvantages** of your system - they may be social (community), economic (money) or environmental. List and explain them.
   d. Include a **drawing** or flow chart of your system. Make sure to clearly **label** the parts.

3. Prepare an **oral presentation** of your project using interesting graphics to maintain the interest of your classmates. Time limit of 10 minutes.

4. Include at least one of the following:
   a. Set-up a **demonstration** to illustrate concepts from your topic (3D model)
   b. Invite a **guest speaker** to talk to the class about your topic - see me for assistance
   c. Provide the class with a **hands-on mini-lab** to illustrate some aspect of your project
   d. Make up a **game** at the end with at least 10 questions. Try to make it fun for the audience.

○ What is your **simple machine**? What is the simple machine's purpose? ○ Identify the various **parts** of your simple machine ○ Are there any **side effects / negatives/ disadvantages** of your system ▪ Social ▪ Economic ▪ Environmental ○ Include a **drawing** or flow chart of your system. Make sure to clearly **label** the parts. ○ **Oral presentation**	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4
Comments	Total /20

Name: _____ DUE Date: _____

Investigating Mechanical Systems – Simple Machines

	Details	Illustration
1st class Lever		
2nd class Lever		
3rd class Lever		
Inclined Plane		

Name: _____ DUE Date: _____

	Details	Illustration
Wheel and Axle		
Wedge		
Screw		
Pulley		