Name:			
Date:			

## **Simple Machine Puzzle**

Cut out all the pictures, titles, and descriptions and place the three that go together beside each other. Note: They are not in order right now.

Pictures	Simple Machines	Description
	PULLEY	A bar resting on a fulcrum that moves a load
	GEAR	Uses grooved wheels and rope to move a load
	WHEEL AND AXLE	A slanted surface connecting a lower surface with a high surface
	WEDGE	A circular object with a rod that helps move loads
0000	INCLINED PLANE	An inclined plane wrapped around a cylinder that holds things together
	SCREW	Used to separate objects
	LEVER	A wheel with teeth around it. Used to change the direction of an object.

Name:	
Date:	

## **Building a Catapult**



Your team will design, construct and test a cotton ball catapult. You will have a limited number of materials to use and you must use all of the materials that are given to you. Tomorrow, your team will compete with the other teams in your class to determine which catapult is most effective.

## **Materials:**

1 cotton ball 1 paint paddle 1 paper cup 1 thumb tack 50 cm of masking tape 1 plastic spoon 2 paper clips 4 rubber bands 1 sheet of poster board

## **Procedure:**

- 1. Design a cotton ball catapult with the materials provided. All the materials must be used to build the cotton ball catapult. The materials can be cut, bent, torn, or otherwise altered, but no replacement parts will be given or traded. (And you may not embed the thumb tack or any other materials in the cotton ball.)
- 2. Your design must be approved by your teacher before you start to build your cotton ball catapult. In your design, be sure to label the simple machines you will use, and explain how your cotton ball catapult will work.
- 3. Once your design has been approved, you may begin to build your catapult.
- 4. After your team has finished constructing the catapult, you may ask for a cotton ball to test out your machine.
- 5. Your team may make any changes to your cotton ball catapult necessary, but be sure to note this on your design sheet.
- 6. Have fun!

Name:			
Date:			
Cotton Balls are Flying			
Please record the distance averages.	ance traveled by each to	eam's cotton ball. Make	e a graph of the
Group:			
Trial 1	Trial 2	Trial 3	Average
Group:			
Trial 1	Trial 2	Trial 3	Average
Group:			
Trial 1	Trial 2	Trial 3	Average
Group:			
Trial 1	Trial 2	Trial 3	Average
Group:		,	
Trial 1	Trial 2	Trial 3	Average
Group:			
Trial 1	Trial 2	Trial 3	Average
Group:			
Trial 1	Trial 2	Trial 3	Average
Group:			
Trial 1	Trial 2	Trial 3	Average
Group:			
Trial 1	Trial 2	Trial 3	Average
Group:			
Trial 1	Trial 2	Trial 3	Average
			J

Name: Date:	
Careers involving Simple Machines	
1. Career:	Simple machine involved:
Job Description:	
Working Conditions:	
Education Level:	
Earnings:	
2. Career:	Simple machine involved:
Job Description:	
Working Conditions:	
Education Level:	
Earnings:	
3. Career:	Simple machine involved:
Job Description:	
Working Conditions:	
Education Level:	
Earnings:	

Name:	
4. Career:	Simple machine involved:
Job Description:	
Working Conditions:	
Education Level:	
Earnings:	
5. Career:	Simple machine involved:
Job Description:	
Working Conditions:	
Education Level:	
Earnings:	
6. Career:	Simple machine involved:
Job Description:	
Working Conditions:	
Education Level:	
Earnings:	
7. Career:	Simple machine involved:
Job Description:	
Working Conditions:	
Education Level:	
Earnings:	