

Name \_\_\_\_\_

Date \_\_\_\_\_

## Simple Machines Test

### Section One: Levers

Draw **two** second class lever pictures: One that shows a lever diagram and another that shows a real world example of a second class lever

Make sure to include the location of the following on both images

- a) fulcrum
- b) effort force
- c) load
- d) class of lever: first, second or third

What is the mechanical advantage of a third class lever?

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Identify the following Levers: Write First Class, Second Class or Third

Class in the space provided

Nutcracker \_\_\_\_\_ Class Lever      Teeter-totter \_\_\_\_\_ Class Lever

Wheel Barrow \_\_\_\_\_ Class Lever      Golf Club \_\_\_\_\_ Class Lever

Pliers \_\_\_\_\_ Class Lever      Cupboard Door \_\_\_\_\_ Class Lever

## Section Two: Pulleys

Complete the following chart

	Fixed Pulley	Moveable Pulley	Combined Pulley
Illustration			
Advantages	You get to pull down, which is easier than pulling up		
Disadvantages			No real disadvantages

### Section Three: Incline Planes and Screws

Mr. Smythenhouser needs to bring his priceless cupcakes down from their hiding shelf on top of Mrs. Harmenheimer's Cupboard

Create three simple sketches showing three different incline planes he can use to retrieve her cupcakes safely

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What 2 Simple Machines make up a screw?

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What are the advantages of each of these Simple Machines?

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## Section Four: Wedges and Wheels and Axles

What happens when the wheel in a wheel and axle is very small?

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List 4 different types of wedges

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,

A pencil sharpener like the one found in this room is a compound machine. List all of the simple machines it is made up of

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### Trivial Pursuit

1. If you had a golf club and you wanted to hit it as far as you possibly could, what class lever would you use? \_\_\_\_\_
2. If a dog fell into a deep well, what simple machine could you use to rescue it?
3. If you wanted to fetch a pie from a high shelf, what simple machine would you use? \_\_\_\_\_
4. If you wanted to cut a watermelon, what simple machine would you use? \_\_\_\_\_