

Name _____

Date _____

Simple Machines Test

Section One: Levers

Draw images of a first, second and third class lever that you would find in the **real world**.

Make sure to include the location of the following

- a) fulcrum
- b) effort force
- c) load
- d) the class of lever

What is the mechanical advantage of a third class lever?

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

Class in the space provided

Hockey Stick _____ Class Lever Paper Cutter _____ Class Lever

Wheel Barrow _____ Class Lever Fishing Rod _____ Class Lever

Book Cover _____ Class Lever Scissors _____ Class Lever

Section Two: Pulleys

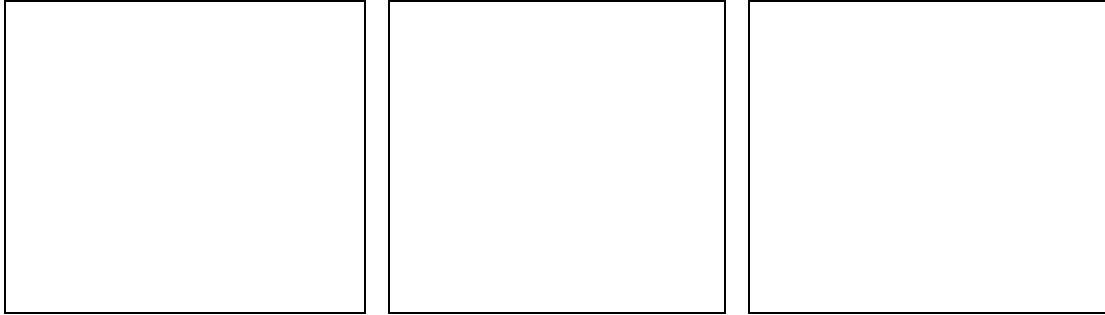
Complete the following chart

	Fixed Pulley	Moveable Pulley	Combined Pulley
Illustration			
Advantages		Reduces the amount of effort force required	
Disadvantages		You have to pull in the same direction as the load is being lifted	

Section Three: Incline Planes and Screws

Mr. Mr. Borschma needs to bring his priceless signed David Beckham poster down from their hiding shelf on top of Smythenholtzen's cupboard

Create three simple sketches showing three different incline planes he can use to retrieve his poster safely



Provide a situation where a screw would be preferable to a nail:

What is the advantage of a nail over a screw?

List 4 different types of screws

_____, _____, _____, _____,

Section Four: Wedges and Wheels and Axles

How does a wedge work? Complete the following sentence filling in the missing words:

A wedge works when you push on its _____ part. This gives you a mechanical advantage by changing the _____ of your _____.

There are two types of wedges. Most wedges, like the blade of an axe, are _____incline planes put together. These wedges are used to _____.

Other wedges, like a doorstop, have only one incline plane. These wedges are used to _____ or stop objects from moving.

Trivial Pursuit

1. If you had a golf ball and you wanted to hit it as far as you possibly could with your golf club, what class lever would you use? _____
2. Human teeth are examples of this simple machine: _____
3. An ulu is an example of this type of simple machine: _____
4. If you wanted to pry a rock up to look under it, what type of simple machine would you use? _____
5. A door handle is an example of this type of simple machine: _____