

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## *Pulleys in Action*

For today's activity you will be looking at a variety of pulleys on the internet. For each pulley system you see, you will answer the same questions. All of the pulley pictures can be found on Mr. Collinson's webpage.

### Questions:

1. What is the pulley system?
2. What is the pulley system used for?
3. How many pulleys are being used?
4. What types of pulleys are being used?
5. Is there mechanical advantage? If so, how much?
6. What is the input to make the system work?

### *System #1:*

1. *Well*  
\_\_\_\_\_
2. *Lifting water from below the ground*  
\_\_\_\_\_  
\_\_\_\_\_
3. *1*  
\_\_\_\_\_
4. *Fixed*  
\_\_\_\_\_
5. *No*  
\_\_\_\_\_
6. *A person pulls the rope, which raises the bucket*  
\_\_\_\_\_

### *System #2:*

1. *Clothesline*  
\_\_\_\_\_
2. *Hanging clothes without having to walk across the backyard*  
\_\_\_\_\_  
\_\_\_\_\_
3. *2*  
\_\_\_\_\_
4. *2 Fixed*  
\_\_\_\_\_
5. *No*  
\_\_\_\_\_
6. *A person pushes the cable, which moves the clothes down the line*  
\_\_\_\_\_

System #3:

1. Weight machine
2. Lifting weights in a more controlled manor than free weights
3. 2
4. 2 Fixed
5. No
6. A person pulls on the bar, which lifts the weights

System #4:

1. Flagpole
2. Raising a flag to the top of a pole
3. 2
4. 2 Fixed
5. No
6. A person pulls the rope, which raises the flag

System #5:

1. Crane
2. Lifting and moving heavy ob jects
3. 4 (two not shown)
4. 2 Fixed, 2 Moveable
5. Yes - 4
6. A motor pulls on the chain and the hook goes up, which lifts the heavy ob ject