

Name: _____

Date: _____

Gears in Action

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

Questions:

1. What is the gear system?
2. What is the gear system used for?
3. How many gears are being used?
4. What types of gears are being used?
5. Is the system used to change speed or direction (or both)?
6. What is the input to make the system work?

System #1:

1. *Engine*

2. *Moving a vehicle*

3. *5*

4. *Spur Gears*

5. *Both*

6. *When the gas explodes it pushes the pistons up, which turns the axle with the gears.*

System #2:

1. *Microscope*

2. *Viewing images at high magnification.*

3. *2*

4. *Rack and Pinion*

5. *Both (mainly direction)*

6. *When you turn the knob it rotates the pinion, which moves up and down the rack.*

System #3:

1. Hand Drill
2. Making a hole in an object
3. 2
4. Bevel Gears
5. Both
6. You turn the handle, which rotates the first gear. The second gear then turns the drill bit

System #4:

1. Transmission
2. Changing the speed or power used to turn an object.
3. 4
4. Worm Gear and Spur Gears
5. Both
6. A motor would be attached to one of the axles.

System #5:

1. Clock
2. Telling us the time of day.
3. 8?
4. Spur Gears (Stacked)
5. Both
6. A battery makes a motor turn one of the gears, which is connected to multiple others.