

### **Pulley Lab Questions**

1. What type of pulley system gives the greatest mechanical advantage?  
How is mechanical advantage calculated?
2. When a ***fixed*** pulley is used to lift a load and the effort is 50lbs, what is the effort required to lift it using a single ***movable*** pulley system?
3. What is the direction of pull in a single movable pulley?
4. How many ropes are holding up the load in a single movable pulley?
5. What is the ***distance*** the ***effort*** (pulled) side moved with a single fixed pulley? with a single movable pulley? (effort up) ... if you are lifting a load 15 ft?
6. What type of pulley system provides only a ***directional*** advantage?
7. Draw a pulley system that would allow YOU to lift a 300 lb load. Label the diagram like we did in your science journals.
8. Explain how pulleys are similar to levers in terms of force and distance.