

Name: _____

Date: _____

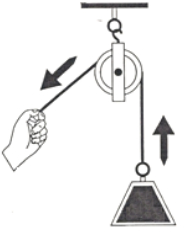
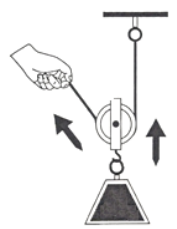
PULLEYS QUIZ

1. What is a pulley?

A pulley is a wheel with a groove in it, and a rope or chain passes over the pulley.

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2. Fill in the table below by naming the type of pulley shown and by using an "x" or a "✓" to indicate correct/incorrect information.

Picture	Type of Pulley	You need less effort when you use this pulley.	You can change direction with this pulley.
	Fixed	x	✓
	Moveable	✓	x

/4

3. What do you call it when pulleys are combined?

Pulley system /1

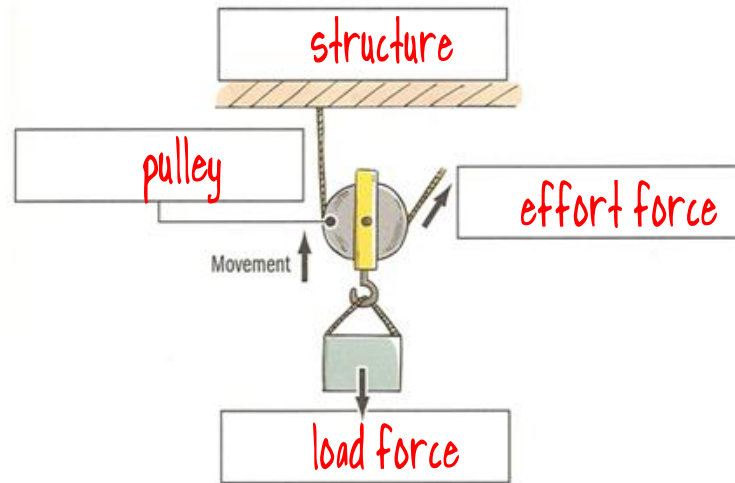
4. Name three examples of things that use pulleys.

Crane /3

Flagpole

Clothesline ...etc

5. Please label the diagram.



/4

6. If a pulley system has a mechanical advantage of 4, what does that mean?

Mechanical advantage tells how much easier the system makes it to lift the load.

This means that it is 4 times easier to lift this load.

This means you only need a quarter of the effort to lift the load.

For example, if you lifted 100 kg, it would only take 25 kg of effort.

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7. Below you will find a comic that I found on the internet. There is something scientifically wrong with it. Please explain what is wrong, relating to pulleys, about this comic.

The elephant is heavy, so the monkey cannot lift him without a lot of mechanical advantage.

This picture shows a system with 5 fixed pulleys.

There is no mechanical advantage to this system.

With this system, the monkey would have to lift all of the elephants weight, which it could not do.

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