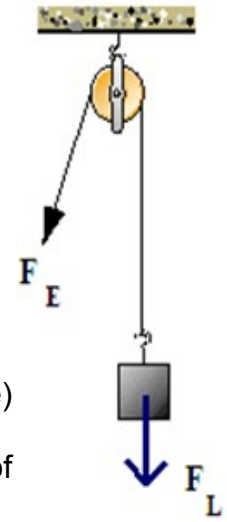
Pulleys and Pulley Systems

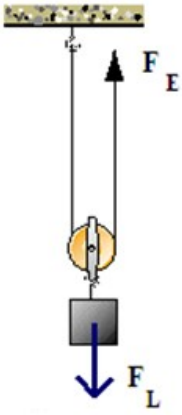
SPH4C



The **pulley** is a member of the _____ family because it is a rigid object that can rotate freely around a **fulcrum**.

The wheel has a _____ in which a _____ or _____ can run.

A single _____ pulley (in which the _____ does not move) gives _____ mechanical advantage but changes the _____ of the effort force (F_E) required to lift the load force (F_L).

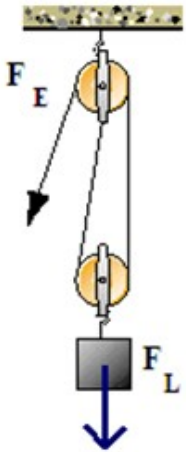


A pulley in which the fulcrum does move when the load is moved is called a _____ pulley.

There *is* a _____ to using this pulley.

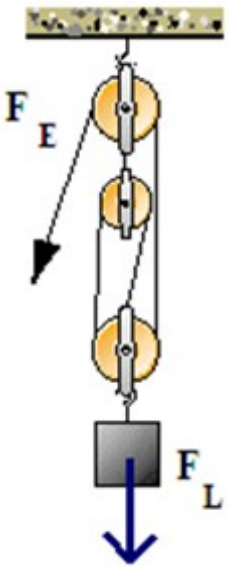
A _____ of pulleys can also give you a mechanical advantage.

The IMA will be equal to the number of _____ (i.e. strands _____).



This system of one fixed pulley and one moveable pulley has _____ support strands.

What is the IMA of a single moveable pulley? IMA = _____



What is the IMA of the pulley system at left?

IMA = _____

So you would expect the F_E to be _____ than the F_L . . .

But _____, the _____, etc.

will _____ your required F_E.

AMA still = $\frac{F_L}{F_E}$