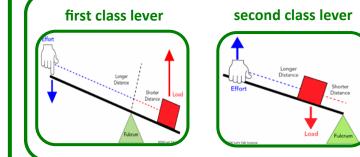
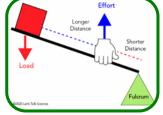
# Science - Year 5 - Why are forces important?





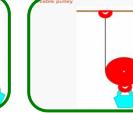
# third class lever



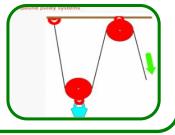
#### fixed pulley



# moveable pulley



compound pulley



#### Sticky Knowledge:

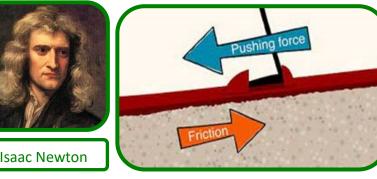
- To know and explain the force of gravity.
- To know a force is measured in a unit called Newtons.
- To know the amount of matter in an object is its mass.
- To know the effects of air resistance, water resistance and friction.
- To know how gears, levers and pulleys work.

## Working scientifically:

- To know what a hypothesis is.
- To know and identify suitable variables to test hypotheses.
- To know how to record data and results.
- To know how to control variables when necessary.
- To know why repeated measurements are sometimes needed.







### **Glossary:**

- gravity a force of attraction that pulls together all matter (anything you can physically touch)
- friction the resistance that one surface or object encounters when moving over another
- air/water resistance a type of friction between air/water and another material
- Newton a unit of force
- lever a simple machine made of a rigid beam and a fulcrum
- pulley a wheel over which a belt, rope or chain is pulled to lift or lower a heavy object
- gears a toothed wheel that works with others to alter the relation between the speed of a driving mechanism
- weight the downward force exerted by an object.
- mass a measurement of how much matter is in an object



• force - a push or a pull