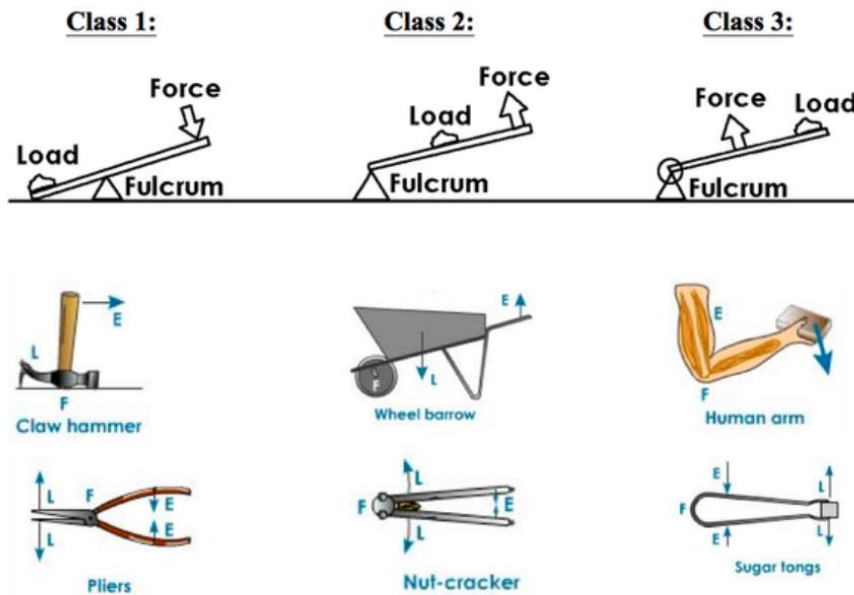


Levers Levers can be used to make a small force lift a larger load.



Copy the diagrams and then give 3 examples of each type of lever

## Gears

Gears are wheels with teeth that slot together. When one gear is turned the other one turns as well. If the gears are of different sizes, they can be used **to increase the power of a turning force**. The smaller wheel turns more quickly but with less force, while the bigger one turns more slowly with more force

### Get a Gear On

Look at these two gears. What do you notice?

- They are the same size.
- They are spinning at the same speed.
- They each have 8 gears
- Gear A is spinning clockwise
- Gear B is spinning counterclockwise



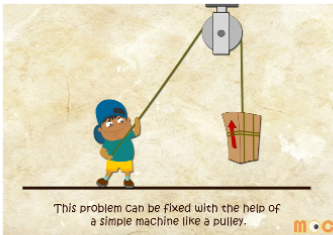
Look at

<https://www.youtube.com/watch?v=5kib5aGuq70>

Cut out a large gear and a small gear (see sheet)  
Try them out  
What do you notice?

## Pulleys

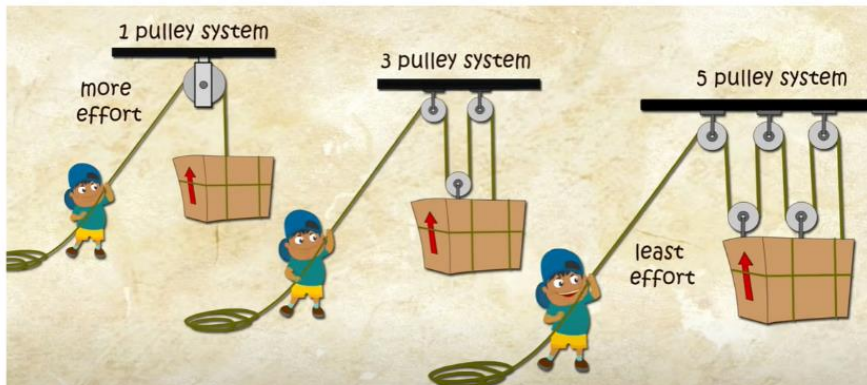
**Pulleys** are made by looping a rope over one or more wheels. They are often used to lift heavy objects: pulling down on one end of the rope creates an upward pull at the other end. Looping it over more than one wheel makes it easier still.



Look at

<https://www.youtube.com/watch?v=LiBcur1aqcg>

What are the advantage and disadvantages of these different pulleys?



Complete the 'lever, gear or pulley' sheet