

Lesson: Levers

What is a lever? - A catapult is a lever. A Lever is a simple machine used to increase Force, and levers usually help people in everyday tasks. Force is something such as a push or a pull.

If you push somebody, you are “forcing” them in a direction.

Example of Force:

- Starwars - use the force!

Example of a Lever:

- Teeter totter in the play ground
- Light switch
- Shifter in a car

Pass out this weeks worksheets

- Pass out worksheet and read through it with the students and have them answer the questions.

Questions:

- Who can give an example of a other levers?

Engineering with Legos : Catapults & Trebuchets



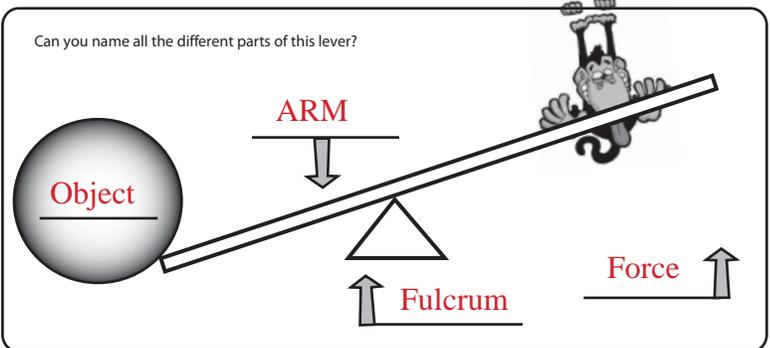
Name: _____

PART ONE: LEVERS IN ACTION

A lever is a simple machine used to increase force. Levers usually help assist in human tasks. Some levers you have seen or used before includes a fork or a spoon.

PARTS OF A LEVER

A basic lever includes the arm and the fulcrum, which is the point that the arm moves around. A lever is often used to help move a large object. The object is placed on one side of the lever and force is applied at the opposite side. The force can either be a push or pull.



PART TWO : QUESTIONS & REVIEW

Can you think of some other examples of levers? _____

Does it make a difference where the fulcrum is placed? _____

See what kind of levers you can find at home and report your findings.

Challenge 1 - Individual build

- Build a lever that can pick up a engineering box 3” without breaking.

Challenge 2 - Individual build

- Build a lever that can pick up a engineering box 5” without breaking.

Challenge 3- Individual build

- Build a lever that can pick up a HEAVIER object 5” without breaking.

Ultimate Challenge- Individual build

- Who can build a lever that can pick up a HEAVIER object the Highest without breaking.