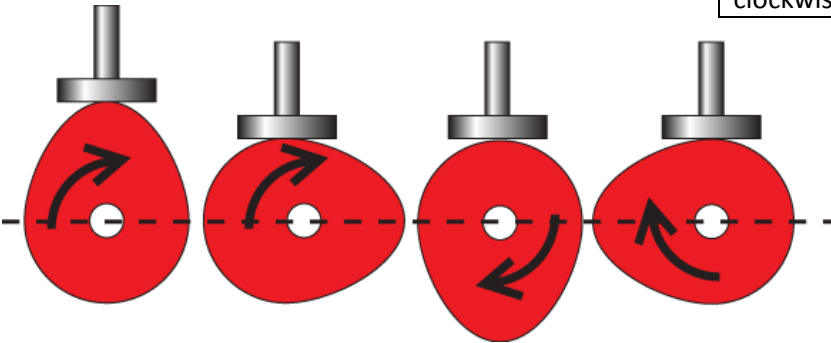


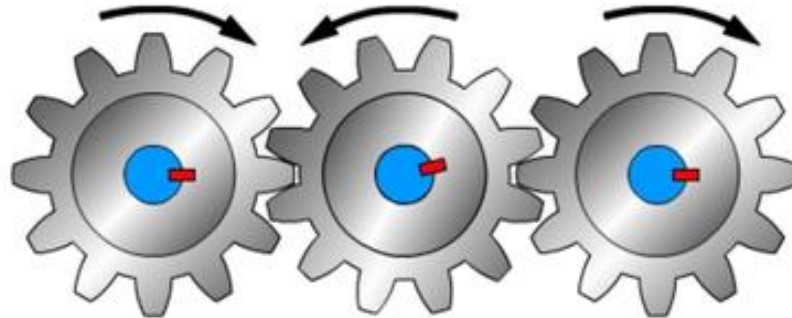
Gears, Pulleys and Cams – Year 6 Spring

Rotary Motion is a circular movement (clockwise or anti-clockwise).	Linear Motion is a movement in a straight line.
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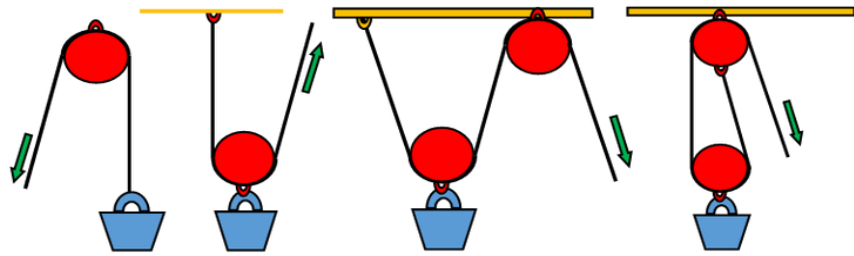
Cams are rotating or sliding pieces in a mechanical system used for transferring rotary motion into linear motion.

Cogs are toothed wheels which are linked by the teeth. A series of cogs linked together make **gears** which move each other.



Key Vocabulary	
Grooved	A surface with a series of bumps which create friction.
Rim	The edge of a wheel.
Load	The weight of an object picked up by a pulley.
Effort	The force that needs to be applied to lift an object attached to a pulley.
Linkage	A series of components linked together to build a working mechanical system.
Mechanical System	A system made of many components which creates movement.
Component	Part of a mechanical system e.g. cog, cam, axle.

Cams, gears and pulleys all use rotary motion to create movement. All components in these mechanical systems move together. Each component has an effect on the movement of the others in the system.



A basic **pulley** is a wheel on a fixed axle with a groove around the rim/edges to guide a rope or cable. More wheels can be added to a pulley system to lift a heavier load without increasing the effort.



Fixed **Moveable** **Compound** **Block & Tackle**