

## Year 5: Forces Knowledge Mat

Subject Specific Vocabulary		Interesting Book	Sticky Knowledge
friction	Friction is a force between two surfaces that are sliding, or trying to slide, across each other.	Important facts to know by the end of the forces topic:	about Forces  □ Frictional force is any force that is caused due to friction. An example of this might be when you put on the brakes on your bike.
gravity	Gravity is a force which tries to pull two objects toward each other.		
air resistance	Air resistance is a type of friction between air and another material. For example, when an aeroplane flies through the air.		Gravity is the pulling force acting between the Earth and a falling object, for example when you drop
water resistance	If you go swimming, there is friction between your skin and the water particles.		something. Gravity pulls objects to the ground.
levers	A lever can be described as a long rigid body with a fulcrum along its length.		<ul> <li>Surface resistance is the force on objects moving across a surface, such as an ice-skater skating on</li> </ul>
pulleys	Pulley is a simple machine and comprises of a wheel on a fixed axle, with a groove along the edges to guide a rope or cable.		ice.  ☐ Any kind of force is really just a push or a pull.
gears	Gears are wheels with teeth that slot together. When one gear is turned the other one turns as well.	know what gravity is and its impact on our lives.     identify and know the effect of air	☐ Air resistance is the force on an object moving through air, such as a plane moving through the sky. Air resistance affects how fast or slowly objects move through the air
parachute		resistance.	
		☐ Water resistance is the force on objects floating on or moving in	
Galileo	Galileo developed the telescope to enable close observation of the night	friction.  • explain how levers, pulleys and gears allow a smaller force to have a greater effect.  • know who Isaac Newton and Galileo were.	water.
Newton	breakthroughs in the area of optics such as the reflecting telescope.		Magnetic force is an invisible force created by electrons. Magnetic force controls magnetism and electricity.

