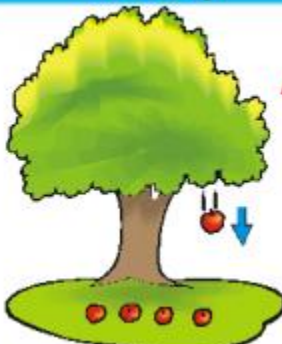


The Marist RC Primary School		Knowledge Organiser		
Year 5, Science Autumn		Forces		
Builds on and leads to ...		Enquiry/skills		
Build on from Year 3... - compare how things move on different surfaces (3-Forces) - notice that some forces need contact between two objects, but magnetic forces can act at a distance Leads to in KS3 ... - using force arrows in diagrams, adding forces in one dimension, balanced and unbalanced forces - measuring forces of compression and stretch		- planning comparative, observation, pattern seeking types of scientific enquiries to answer questions, including recognizing and controlling variables where necessary - taking measurements with increasing accuracy and precision, taking repeat readings when appropriate - recording data and results of increasing complexity using tables, diagrams and line graphs - using test results to make predictions to set up further comparative and fair tests - writing conclusions using causal relationships and explanations of and degree of trust in results and recognising patterns in results		
What will I know by the end of the unit?		Vocabulary		
- explain that unsupported objects fall towards the Earth because of the force of gravity - identify the effects of air resistance, water resistance and friction, that act between moving surfaces - recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect		force	A push or pull on an object when it interacts with another object	
		mass	The quantity of an object	
		friction	The action of one surface or object rubbing against another	
		levers	A rigid bar used to move something	
		gear	Toothed wheel that engages with another toothed wheel or with a rack in order to change the speed or direction of motion	
		pulley	A wheel with a grooved rim in which a rope, chain, or belt can run in order to change the direction or point of application of a force applied to the rope.	
		water resistance	Water resistance is a type of friction caused when an object moves through water. The water pushes against the object moving as this is water which slows it down.	
Diagrams / Maps / Images				
 Objects fall towards the Earth because of the force of gravity acting between the falling object and the Earth.  Air resistance is a type of friction. Air resistance is air pushing against a moving object. This can slow the speed of the travelling object.  Assessment Task End of unit knowledge test using words in everyday life situations Scientific Working assessment planning an investigation with focus skill writing conclusions				