



Forces

Year 5

Physics

National curriculum objective

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.
- Identify the effect of air resistance, water resistance and friction, that act between moving surfaces.
- Recognise that some mechanisms, including lever, pulleys, and gears, allow a smaller force to have a greater effect.

Key Vocabulary (topic words must be spelt correctly throughout topic)

gravity	air resistance	water resistance	friction
levers	pulleys	gears	push
Force meter	Newton's	Isaac Newton	force
pull	paper spinner	fair testing	change direction
stop	speed up	slow down	
change shape	magnetic	poles	
repel	prediction	attract	

Substantive - Subject Knowledge Bigger Picture - Support words

levers	
friction	
force	
gears	
variables	

Questions driven outcomes for knowledge

	Child	Teacher
How can we explain why unsupported objects fall towards the Earth because of the force of gravity, acting between the Earth and the falling object?		
How can we investigate the effect of air resistance between moving surfaces?		
How can we investigate the effect of water resistance between moving surfaces?		
How can we investigate the effect of friction between moving surfaces?		
How to mechanisms such as leavers, gears and pulleys enable a small force to have a greater effect?		