



Physics - Forces progression of substantive knowledge

Statements in red are from linked science units.

Year	Core Knowledge
EYFS	Explore the natural world around them.
	Describe what they see, hear and feel whilst outside.
KS1 Cycle A	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. (Y2 - Uses of everyday materials)
KS1 Cycle B	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. (Y2 - Uses of everyday materials)
Year 3	Compare how things move on different surfaces.
	Notice that some forces need contact between two objects, but magnetic forces can act at a distance.
	Observe how magnets attract or repel each other and attract some materials and not others.
	Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.
	Describe magnets as having two poles.
	Predict whether two magnets will attract or repel each other, depending on which poles are facing.
Year 5	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.
	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.