Science Skills Coverage-Forces

Skill	Y3	Y4	Y5	Y6
Identify/ Function	Name a range of familiar daily activities which are caused by forces and magnets. Describe forces in actions –pulling and pushing and whether the force require direct contact between objects or whether the force can act at a distance. Explain the terms magnetic attraction, repulsion and magnetic poles.	Identify how the magnetic north and south pole is different to the geographic north and south poles. Demonstrate key forces in actions during a given activity. Develop research skills using secondary sources, eg Find out why auroa form at north and south magnetic poles.	Identify and define opposing forces that act upon objects moving through air, water or along a surface. Describe the force of gravity, what causes it and how it can change. Use study of scientists Newton/Galileo. Demonstrate, using a model, how simple levers, gears and pulleys assist the movement of objects.	Recap previous years
Predictions	Make predictions, explain thinking and then test a range of magnets for strength and polarity.		Make predictions to test the effect of friction of movement and distance travelled.	
Classification	Sort and group		Classify and group	

	materials into those that are magnetic and those that are not and identify patterns.		forces based on their actions or whether they act directly or at distance.	
Measuring	Compare how an object moves over surfaces made from different materials making predictions and measuring distance travelled.	Test whether any materials block magnetic attractions. Compare the speed in which objects fall to the ground through the same distance of air or water, using their knowledge of forces to explain.	Compare the speed with which objects of different shapes and different surface area fall through air and explain reasons for differences.	