

## **1.3 Contact Forces**



Lesson	Know	Apply	Extend
1.3.1 Friction and drag	I can identify examples of drag forces and friction.	I can describe the effect of drag forces and friction.	I can explain the effect of drag forces and friction in terms of forces.
	I can describe how drag forces and friction arise.	I can explain why drag forces and friction arise.	I can explain why drag forces and friction slow things down in terms of forces.
	I can write down two things an object can do when the resultant force on it is zero.	I can describe what happens to a moving object when the resultant force acting on it is zer	I can interpret the motion of objects subject to drag forces and friction.
	I can carry out an experiment to test a prediction of friction caused by different surfaces.	I can plan and carry out an experiment to investigate friction, selecting suitable equipment.	I can plan and carry out an experiment, stating the independent, dependent, and control variables.
1.3.2 Squashing and stretching	I can state an example of a force deforming an object.	I can describe how forces deform objects.	I can explain how forces deform objects in a range of situations.
	I can recognise a support force.	I can explain how solid surfaces provide a support force.	I can explain how solid surfaces provide a support force, using scientific terminology and bonding.
	I can use Hooke's Law to identify proportional stretching.	I can use Hooke's Law to predict the extension of a spring.	I can apply Hooke's Law to make quantitative predictions with unfamiliar materials.
	I can state how you know from a graph that a relationship is linear, present data in a line graph, and identify a pattern.	I can present data in a graph and identify a quantitative relationship in the pattern.	I can present data in a graph and recognise quantitative patterns and errors.
1.3.3 Turning forces	I can state the law of moments.	I can describe what is meant by a moment.	I can apply the concept of moments to everyday situations.



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Lesson	Know	Apply	Extend
	•	I can calculate the moment of a force.	I can use calculations to explain situations involving moments.
		I can independently identify scientific questions from results.	I can suggest relevant, testable uestions.