**Year 7 Forces & Motion (S2)**

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| --- | --- | --- | --- | --- |
| 1. I can identify a range of different forces and the effects they have
 | \* | ☺ | 😐 | ☹ |
| 1. I can describe what a Newton Meter is and how to use one
 | \* | ☺ | 😐 | ☹ |
| 1. I can interpret a force diagram and describe the forces acting in a range of different scenarios
 | \* | ☺ | 😐 | ☹ |
| 1. I can draw force diagrams for a range of real-life situations
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can show how forces are needed to stop, start, change the speed or direction of motion
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can identify that frictional forces oppose motion
 | \* | ☺ | 😐 | ☹ |
| 1. I can state what a balanced force is and can give real-life examples
 | \* | ☺ | 😐 | ☹ |
| 1. I can compare balanced and unbalanced forces
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can list the forces that deform objects
 | \* | ☺ | 😐 | ☹ |
| 1. I can describe an experiment to measure the stretch or compression of a spring as the force is changed
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can state Hooke’s Law
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can measure distance and time with correct units
 | \* | ☺ | 😐 | ☹ |
| 1. I can calculate average speed when I am given the speed and distance travelled by an object
 | \* | ☺ | 😐 | ☹ |
| 1. I can describe a journey based on its distance-time graph
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can draw a distance-time graph of a journey
 | Ext | ☺ | 😐 | ☹ |
| 1. I can calculate speed from a distance-time graph
 | Ext | ☺ | 😐 | ☹ |
| 1. I can describe what friction is and how it affects the movement of an object
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can explain what causes friction and how its effects can be increased and reduced
 | Ext | ☺ | 😐 | ☹ |
| 1. I can give examples of when friction is useful and when it is a problem
 | \*\* | ☺ | 😐 | ☹ |
| 1. I can state what air resistance is and what causes it
 | \* | ☺ | 😐 | ☹ |
| 1. I can explain how air resistance varies with speed, shape and surface area
 | Ext | ☺ | 😐 | ☹ |

I understand (and can spell) the keywords listed below and can use them in 1-21 above.

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| **Keywords** |
| prediction, fair test, risks, table, patterns, conclusions,friction, weight, drag forces, air resistance, water resistance, squashing, stretching,speed, trundle wheel, meter stick/ruler, speed, timer |
| hypothesis, precautions, risk level, independent variable, control variable, dependent variable, repeats, average, anomaly, repeatability, scatter graph, range, range bars, line of best fit, mass, upthrust, contact force, lift, tension,Newtons (N), force diagrams, balanced forces, unbalanced forces, resultant force, opposing forces,stationary, speed up, slow down, constant speed, change direction, original length, stretch, compression, deforming, spring, trampoline, catapult, elastic energy, Hooke,stop clock, light gate, distance travelled, distance/time graph, stationary, constant speedaverage speed = distance travelled time taken |
| justification, resolution, measurement uncertainty,non-contact force, magnetic force, electric force, reaction,surface tension,equilibrium, accelerate, decelerate,elastic deformation, elastic limit, extension, load, Hooke’s Law, directly proportional,gradient, velocity, accelerate, decelerate, *terminal speed* |