

Year 7 Science Personalised Learning Checklist- Spring 1
Forces

	Learning Statements	R	A	G
1	Recall the unit for force			
2	Describe how forces can be measured using a Newton meter			
3	Define "contact" and "non contact" forces			
4	Recall examples of contact and non-contact forces			
5	Draw freebody diagrams to represent the forces acting upon different objects			
6	Predict what will happen when the forces acting upon an object are either balanced or unbalanced			
7	Define "resultant force"			
8	Calculate resultant force in a given scenario			
9	Recall Newton's three laws (Extension only)			
10	Apply Newton's three laws to a range of scenarios (Extension only)			
11	Recall Hooke's Law (Extension only)			
12	Investigate Hooke's Law using a spring (Extension only)			
13	Describe the advantages and disadvantages of friction in a range of scenarios			
14	Design objects that are streamlined and link your design to friction and particles			
15	Define "moment" (Extension only)			
16	Calculate moments using $M=Fd$ (Extension only)			
17	Predict what will happen when moments are either balanced or unbalanced (Extension only)			
18	Calculate speed using $s=d/t$			
19	Define "speed" and "acceleration"			
20	Draw a distance time graph from given data			
21	Interpret a given distance time graph			
22	Draw a velocity time graph from given data			
23	Interpret a given velocity time graph			
24	Define "mass" and "weight"			
25	Recall the gravitational field strength on Earth (9.8N/kg)			
26	Use the formula $W=mg$ to calculate weight in given scenarios			
27	Identify the main components of our solar system			
28	Recall the order of the 8 planets			
29	Define "orbit" and link to length of a year			
30	Explain how day and night are caused			
31	Explain how the seasons are caused			
32	Define "galaxy" and "universe"			
33	Rank moons, planets, stars, solar systems, galaxies and the universe in terms of size			
34	Define "light year"			
35	Describe how theories about the universe have changed over time (Extension only)			
36	Define "artificial satellites" and "natural satellites"			
37	Describe methods of investigating space			