## Pupil's Name:

## A Year 6 Scientist

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	EXPECTATIONS	SEEN	SECURE
	Working Scientifically		
1	I can plan different types of scientific enquiries to answer questions.		
2	I can control variables in an enquiry.		
3	I can measure accurately and precisely using a range of equipment, including newton metres.		
4	I can take repeat readings when appropriate to ensure accuracy.		
5	I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.		
6	I can use the outcome of test results to make predictions and set up a further comparative test.		
7	I can choose the most efficient method to report findings from enquiries.		
8	I can explain a conclusion from an enquiry.		
9	I can explain causal relationships in an enquiry with an explanation of the degree of trust in results.		
10	I can relate the outcome from an enquiry to scientific knowledge in-order to state whether evidence supports or disproves an argument or theory.		
П	I can read, spell and pronounce scientific vocabulary accurately.		
	Living Things and their Habitats — Classifying and Sorting		
12	I can describe how living things are classified into broad groups according to common observable characteristics including micro-organisms, plants and animals		
13	I can describe how living things are classified into broad groups based on similarities and differences, including micro-organisms, plants and animals.		
14	I can give reasons for classifying plants and animals based on specific characteristics.		
15	I know the broad groupings, such as micro-organisms can be sub-divided.		
16	I can classify animals into commonly found invertebrates (such as insects, spiders, snails worms) and vertebrates (fish, amphibians, reptiles, birds and mammals).		
17	I can discuss reasons why living things are placed in one group and not another.		
18	I can find out about the significance of the work of scientists such as Carl Linnaeus, a pioneer of classification		
19	I can read, spell and pronounce scientific vocabulary accurately linked to living things and habitats.		
	Animals, including humans — Pattern Seeking		
20	I can identify and name the main parts of the human circulatory system.		
21	I can describe the functions of the heart, blood vessels and blood.		
22	I can describe how and which nutrients and water are transported within animals, including humans.		
23	I recognise the impact of diet, exercise, drugs and lifestyle on the way our bodies function.		
24	I know that some drugs and other substances can be harmful to the human body.		
25	I can read, spell and pronounce scientific vocabulary accurately linked to animals, including humans.		
	Evolution and inheritance — Observation over time		
26	I recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.		
27	I recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.		
28	I know that characteristics are passed from parents to their offspring. (eg. different breeds of dogs)		
29	I can identify how animals and plants are adapted to suit their environments in different ways.		
30	I know that adaptation may lead to evolution.		

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31	I know that variation in offspring over time can make animals more or less able to survive in particular environments.				
32	I can find out about the work of palaeontologists such as Mary Anning and how Charles Darwin and Alfred Wallace developed their ideas on evolution.				
33	I can read, spell and pronounce scientific vocabulary accurately linked to evolution and inheritance.				
	Light — Pattern Seeking and Surveys				
34	I can recognise that light appears to travel in straight lines.				
35	I can use the idea that light travels in straight lines to explain how objects are seen (detail light from a light source will reflect off an object into our eyes).				
36	I can explain that we see things because light travels from a light source to our eyes or from light sources to objects and then to our eyes.				
37	I can use the idea that light travels in straight lines to explain why shadows have the same shape as the object that cast them.				
38	I can read, spell and pronounce scientific vocabulary accurately linked to light.				
	Electricity — Fair Testing				
39	I can associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in a circuit.				
40	I can compare and give reasons for variations in how components function, including brightness of bulbs, the loudness of buzzers and the on/off position.				
41	I can use recognised symbols when representing a simple circuit diagram.				
42	I can construct simple series circuits.				
43	I can identify the effect of changing one component at a time in a circuit.				
44	I can read, spell and pronounce scientific vocabulary accurately linked to electricity.				