Being a Scientist Year Six

Working Scientifically means I can:

1. Plan different types of scientific enquiry.
2. Control variables in an enquiry.
3. Measure accurate and precisely using a range of equipment.
4. Record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
5. Use the outcome of test results to make predictions and set up a further comparative fair test.
6. Report findings from enquiries in a range of ways.
7. Explain a conclusion from an enquiry.
8. Explain causal relationships in an enquiry.
9. Relate the outcome from an enquiry to scientific knowledge in order to state whether evidence supports or refutes an argument or theory.
10. Read, spell and pronounce scientific vocabulary accurately.

Being a physicist means I can:

Light

1. Explain how light travels.
2. Explain and demonstrate how we see objects.
3. Explain why shadows have the same shape as the object that casts them.
4. Explain how simple optical instruments work e.g. periscope, telescope, binoculars, mirror, magnifying glass etc.

Electricity

5. Explain how the number & voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer.
6. Compare and give reasons for why components work and do not work in a circuit.
7. Draw circuit diagrams using correct symbols.

Being a biologist means I can:

Animals, including humans

1. Identify and name the main parts of the human circulatory system.
2. Describe the function of the heart, blood vessels and blood.
3. Discuss the impact of diet, exercise, drugs and lifestyle on health.
4. Describe the ways in which nutrients and water are transported in animals, including humans.

Living things and their habitats

5. Classify living things into broad groups according to observable characteristics and based on similarities and differences.
6. Describe how living things have been classified.
7. Give reasons for classifying plants and animals in a specific way.

Evolution and inheritance.

8. Describe how the earth and living things have changed over time.
9. Explain how fossils can we used to find out about the past.
10. Explain about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents).
11. Explain how animals and plants are adapted to suit their environment.
12. Link adaption over time to evolution.
13. Explain evolution.