**St Oswald’s C E Primary School**

 **Assessment Criteria Science Stage 5**

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| **Name:** | **Class:** | **Year:** | **Aut** | **Spr** | **Sum**  | **Overall** |
| Start score: | Target Score: | End Score: |
| **Working scientifically** Pupils should be taught to use the following practical scientific methods, processes and skills: |
| 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. |  |  |  |  |
| 2. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. |  |  |  |  |
| 3. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. |  |  |  |  |
| 4. Use test results to make predictions to set up further comparative and fair tests. |  |  |  |  |
| 5. Report & present findings from enquiries, inc conclusions, causal relationships & explanations of & degree of trust in results, in oral & written forms such as displays & other presentations. |  |  |  |  |
| 6. Identify scientific evidence that has been used to support or refute ideas or arguments. |  |  |  |  |
| **Living things and their habitats** |
| 7. Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. |  |  |  |  |
| 8. Describe the life process of reproduction in some plants and animals. |  |  |  |  |
| **Animals, including humans** |
| 9. Describe the changes as humans develop to old age. |  |  |  |  |
| **Properties and changes of materials** |
| 10. Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. |  |  |  |  |
| 11. Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic. |  |  |  |  |
| 12. Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. |  |  |  |  |
| 13. Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. |  |  |  |  |
| 14. Demonstrate that dissolving, mixing and changes of state are reversible changes. |  |  |  |  |
| 15. Explain that some changes result in the formation of new materials, & that this kind of change is not usually reversible, inc changes associated with burning & the action of acid on bicarbonate of soda. |  |  |  |  |
| **Earth and space** |
| 16. Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. |  |  |  |  |
| 17. Describe the movement of the Moon relative to the Earth. |  |  |  |  |
| 18. Describe the Sun, Earth and Moon as approximately spherical bodies. |  |  |  |  |
| 19. Use the idea of the Earth’s rotation to explain day and night. |  |  |  |  |
| 20. Use the idea of the Earth’s rotation to explain the apparent movement of the Sun across the sky. |  |  |  |  |
| **Forces** |
| 21. Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. |  |  |  |  |
| 22. Identify the effects of air resistance and water resistance that act between moving surfaces. |  |  |  |  |
| 23. Identify the effects of friction, that act between moving surfaces. |  |  |  |  |
| 24. Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. |  |  |  |  |
| **Emerging**  | **Expected** | **At Greater Depth** |  |  |  |  |  |  |
| 5.1 | 5.2 | 5.3 | 5.4 |  5.5 |  |  |  |  |  |  |  |
| 1-8 | 9-18 | 18-21 | 22-24 | 24  |