

Science end of year expectations – Year 5 – All, Most and Some

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| <p>A) Working Scientifically</p> | <ol style="list-style-type: none"> 1. ALL: I can plan enquiries, including recognising and controlling variables where necessary with support MOST: I can plan enquiries, including recognising and controlling variables where necessary SOME: I can plan enquiries, including recognising and controlling variables where necessary and explain my decisions. 2. All : I can take measurements, using a range of scientific equipment, with increasing accuracy and precision 3. ALL: I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models 4. ALL : I can report findings from enquiries, including oral and written explanations of results and draw conclusions with support. MOST: I can report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions. SOME: I can independently report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships and conclusions drawing on existing scientific knowledge. 5. ALL: I can present findings in written form, displays and other presentations. 6. ALL: I can use test results to make predictions to set up further comparative and fair tests. 7. ALL: I can use simple models to describe scientific ideas 8. ALL: I can identify scientific evidence that has been used to support or refute, ideas or arguments. |
| <p>B) Living Things and Their Habitats</p> | <ol style="list-style-type: none"> 1. ALL: I can identify the steps in the life cycles of different plants and animals MOST: I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird SOME: I can compare and evaluate the life cycles in some plants and animals and offer explanations for their differences. 2. MOST: I can describe the life process of reproduction in some plants and animals. |
| <p>C) Animals including Humans</p> | <ol style="list-style-type: none"> 1. ALL: I can identify different stages as humans develop to old age. MOST: I can describe the changes as humans develop to old age. SOME: I can explain the changes as humans develop to old age. |
| <p>D) Properties and Changes of Materials</p> | <ol style="list-style-type: none"> 1. ALL: I can compare and group together everyday materials on the basis of their properties and suggest explanations for my choices. MOST: I can 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 SOME: I can suggest possible ways of testing using existing scientific knowledge the properties of everyday materials so that results are quantifiable and comparable. |



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| | <ol style="list-style-type: none">2. ALL: I know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution3. ALL: I can suggest, from everyday observations, where mixtures are separated. MOST: I can use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating SOME: I can explain the scientific processes involved in separating different mixtures.4. ALL: I can give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic5. ALL: I can suggest, from everyday observations, examples of where dissolving, mixing and changes of state are reversible. MOST: I can demonstrate that dissolving, mixing and changes of state are reversible changes SOME: I can explain the scientific processes involved in dissolving, mixing and changes of state and how they are reversible.6. ALL: I can explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda. |
| E) Earth and Space | <ol style="list-style-type: none">1. ALL: I can identify different parts of the solar system. MOST: I can describe the movement of the Earth, and other planets, relative to the Sun in the solar system SOME: I can describe and explain different theories about the movement of the sun and the Earth relative to each other.2. MOST: I can describe the movement of the Moon relative to the Earth3. ALL: I can describe the Sun, Earth and Moon as approximately spherical bodies4. ALL: I can use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. |
| F) Forces | <ol style="list-style-type: none">1. ALL: I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object2. ALL: I can suggest examples of air resistance, water resistance and friction and how they affect objects. MOST: I can identify the effects of air resistance, water resistance and friction, that act between moving surfaces SOME: I can explain how air resistance, water resistance and friction acts on objects.3. ALL: I can recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. |