



"Science Skills" Progress Check

Name

Date

| | Learning Outcomes | ✓😊 | ?😐 | ✗😞 |
|----|--|----|----|----|
| 1 | I can develop and state the aim of an experiment. | | | |
| 2 | I can make predictions and hypotheses based on information, observations, and my knowledge. | | | |
| 3 | I can define the independent variable as the variable that is controlled over a set range. | | | |
| 4 | I can define the dependent variable as the variable that is being measured. | | | |
| 5 | I can identify the independent and dependent variables in an investigation. | | | |
| 6 | I can identify variables to control to make sure my experiment is a fair test. | | | |
| 7 | I can identify safety hazards when planning and carrying out practical work | | | |
| 8 | I can plan experiments, using appropriate practical techniques. | | | |
| 9 | I can write a step by step plan for my experiment. | | | |
| 10 | I can draw a labelled sectional diagram of an experiment. | | | |
| 11 | I can carry out practical work safely, and in an organized manner. | | | |
| 12 | I can make accurate measurements and record them in a table with headings and units. | | | |
| 13 | I can state that a control experiment is when only one variable is altered at a time, so that the results can be clearly observed. | | | |
| 14 | I can identify when a control experiment is needed. | | | |
| 15 | I can choose an appropriate method to present my results (bar graph, line graph, table, chart, diagram) | | | |
| 16 | I can draw a bar graph with labels, units, and a uniform scale. | | | |
| 17 | I can draw a line graph with labels, units, a uniform scale, and a best fit line or curve. | | | |
| 18 | I can analyse data to find a relationship between the independent and dependent variable. | | | |
| 19 | I can make links between my findings, aim and hypothesis. | | | |
| 20 | I can draw conclusions based on my results and my aim. | | | |

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| 21 | I can explain the science related to my investigation. | | | |
| 22 | I can apply the information I found out in an investigation to a new situation. | | | |
| 23 | I can identify gaps in my investigation, and further research that would be required. | | | |
| 24 | I can consider alternate explanations for my experimental results. | | | |
| 25 | I can evaluate my investigation, and can suggest at least two ways of improving it. | | | |
| 26 | I can evaluate the relevance and reliability of data that I have gathered. | | | |
| 27 | I can communicate scientific information orally and through report writing. | | | |
| 28 | I can select an appropriate method of communication, based on my audience. | | | |
| 29 | I can provide evidence to support my ideas. | | | |
| 30 | I can make links between different topics in science. | | | |
| 31 | I can make links between what I have learned in science and what I have learned in other subjects or outside of school. | | | |
| 32 | I can apply my knowledge of science to new situations. | | | |
| 33 | I can use my knowledge of science to solve problems. | | | |
| 34 | I can apply my knowledge of science and creativity to the process of designing, constructing, testing, and modifying. | | | |
| 35 | I can identify different ways that science has impacted society. | | | |
| 36 | I can debate scientific issues, demonstrating respect for the views of others. | | | |
| 37 | I can discuss the ethical implications of a scientific issue. | | | |
| 38 | I can select relevant information from a source. | | | |
| 39 | I am able to identify reliable sources of scientific communication by considering the reputation of the author and the purpose of communication. | | | |
| 40 | I am able to separate fact from opinion by considering the author's perspective, the purpose of the communication, and the quality of supporting evidence. | | | |

In this topic I have successfully.....

To make further progress I should.....

Target: In the next topic I will.....