



# Science Skills Ladder

## Adventurers 1

- Sc15** Ask relevant questions
- Sc16** With help, set up and carry out simple practical enquiries, comparative and fair tests
- Sc17** Suggest what might happen in comparative and fair tests
- Sc18** Make careful observations and comparisons
- Sc19** Recognise what constitutes a fair test
- Sc20** Identify simple patterns, changes, similarities and differences
- Sc21** Make measurements using standard units
- Sc22** Discuss and describe findings
- Sc23** Communicate findings using simple scientific language in written explanations, drawings, labelled diagrams, keys, bar charts or tables
- Sc24** Use results to draw simple conclusions

## Adventurers 2

- Sc25** Set up and carry out simple practical enquiries, comparative and fair tests
- Sc26** Put forward ideas about testing and make predictions
- Sc27** Make close observations and comparisons
- Sc28** Observe patterns and suggest explanations
- Sc29** Collect data
- Sc30** Recognise and explain why a test is fair or unfair
- Sc31** Identify simple trends to answer questions
- Sc32** Make accurate measurements using standard units and begin to think about why measurements should be repeated
- Sc33** Use scientific evidence to answer questions
- Sc34** Use a range of equipment, including data loggers and thermometers
- Sc35** Gather and record findings through drawings, photographs, labelled diagrams, keys, models, presentations, tables, graphs and displays, using scientific language
- Sc36** Report on what the evidence shows through written explanations of results and conclusions and reports
- Sc37** Use results to draw simple conclusions, suggest improvements and raise further questions

# Science Skills Ladder

## Navigators 1

- Sc38** Plan different types of scientific investigations
- Sc39** Make predictions based on scientific knowledge
- Sc40** Carry out a range of scientific investigations
- Sc41** Begin to recognise and control variables where appropriate during investigations
- Sc42** Identify trends and patterns and offer explanations for these
- Sc43** Carry out a fair test explaining why it is fair
- Sc44** Take measurements using a range of scientific equipment with increasing accuracy and precision
- Sc45** Understand why observations and measurements need to be repeated
- Sc46** Select information from provided sources
- Sc47** Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs
- Sc48** Produce written explanations of results, causal explanations and conclusions
- Sc49** Use results to make predictions for further tests

## Navigators 2

- Sc50** Select and plan the most appropriate type of scientific enquiry to answer specific questions
- Sc51** Make predictions based on scientific knowledge and understanding
- Sc52** Carry out a range of scientific investigations
- Sc53** Recognise and control variables where appropriate during investigations
- Sc54** Identify scientific evidence that has been used to support or refute ideas
- Sc55** Take measurements using a range of scientific equipment with accuracy and precision
- Sc56** Decide when observations and measurements need to be checked, by repeating, to give more reliable data
- Sc57** Select information from a range of sources
- Sc58** Record data and results of increasing complexity, using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models, making appropriate use of ICT
- Sc59** Reporting findings from investigations, including written explanations of results, explanation involving causal relationships, and conclusions
- Sc60** Present reports of findings in written form, displays and presentations
- Sc61** Use test results to make predictions and set up further comparative and fair tests