

# Science Skills Ladder

## Pathfinders 1

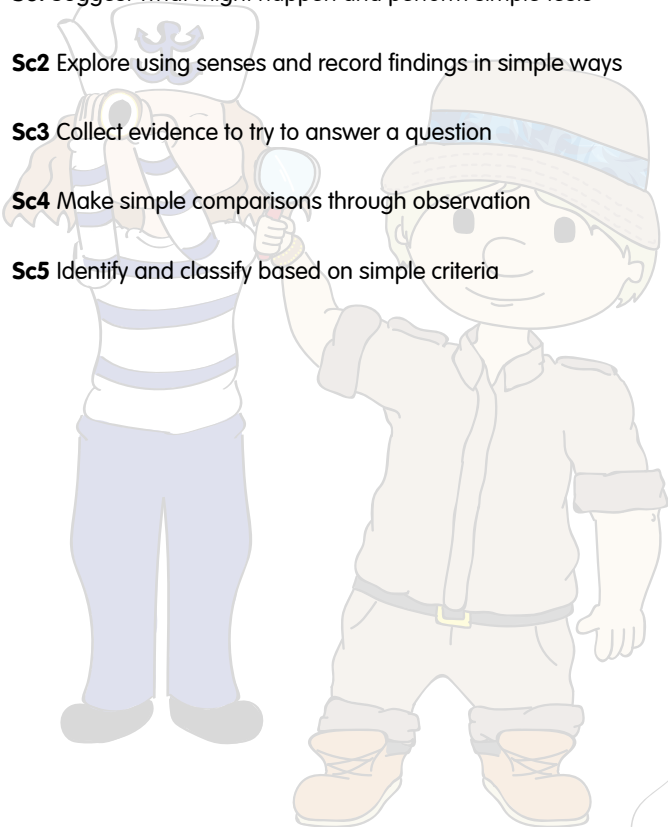
**Sc1** Suggest what might happen and perform simple tests

**Sc2** Explore using senses and record findings in simple ways

**Sc3** Collect evidence to try to answer a question

**Sc4** Make simple comparisons through observation

**Sc5** Identify and classify based on simple criteria



## Pathfinders 2

**Sc6** Explore and observe in order to collect data and describe and compare findings

**Sc7** With help, suggest some ideas and questions and predict what might happen

**Sc8** Use first-hand observation, own experience and simple information sources to make comparisons and answer questions

**Sc9** Observe closely using simple equipment

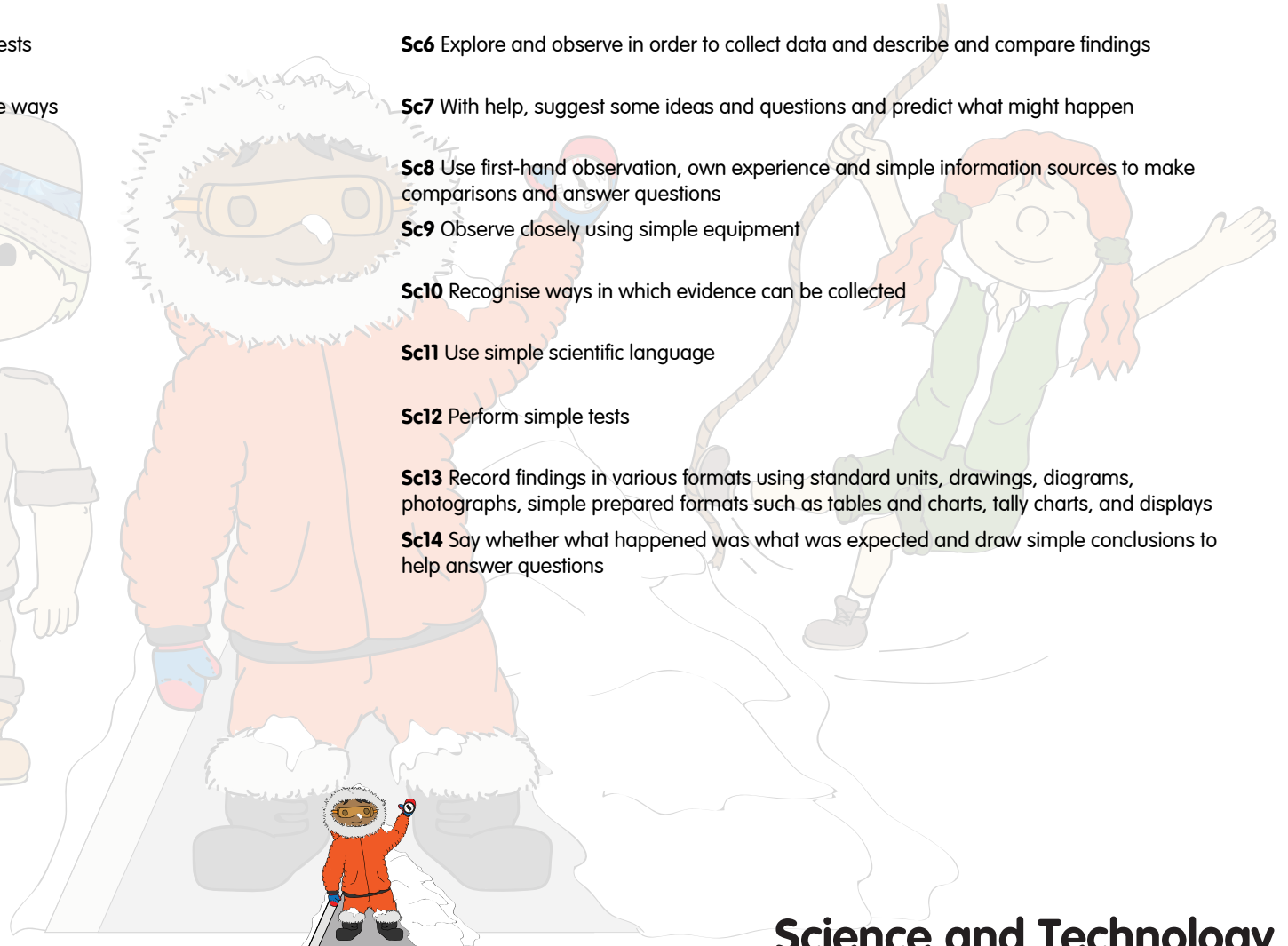
**Sc10** Recognise ways in which evidence can be collected

**Sc11** Use simple scientific language

**Sc12** Perform simple tests

**Sc13** Record findings in various formats using standard units, drawings, diagrams, photographs, simple prepared formats such as tables and charts, tally charts, and displays

**Sc14** Say whether what happened was what was expected and draw simple conclusions to help answer questions



# 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