

# Finding Fin a New Home

## About the Module

Students will carry out a practical river study, investigating the ecosystem of a river. The focus of the study is the identification of a suitable environment for Fin the fish to live in. They will take precise measurements including width, depth and velocity, at contrasting points along the river. They will also catch and examine the living things which inhabit the river, learning about the interdependence of plants and animals and the possible effects of pollution. Digital photographs will be taken of the river environment, living things and the processes involved.



The data collected will be entered into a spreadsheet to produce a depth profile of the river, showing deep and shallow sections that are needed for feeding, sleeping, playing etc. These will be annotated with written labels and photographs of the river site. Students will also use ICT to create a poster, presenting one location as the most suitable for Fin's new home. The poster will use a combination of text and images to persuade the audience, using scientific information and reasoning.

## Key Vocabulary

Spreadsheet, cell, column, row, data, accuracy, measurement, formula, graph, text, image, digital camera, download, layout, font, text effect, title, caption, audience, water cycle, river, erosion, transportation, deposition, temperature, time, distance, width, depth, velocity, habitat, predator, prey, producer, consumer, food chain, identification key, invertebrate, substrate, fair test.

## Desired Learning Outcomes

During this module students will learn to:

- Compare the physical features at two sections of the same river;
- Recognize the relationship between physical, chemical and biological properties of a river;
- Collect accurate data;
- Enter data into a spreadsheet;
- Understand the importance of precision when transferring data into a spreadsheet;
- Use a spreadsheet to create graphs and charts;
- Interpret information presented in a spreadsheet and graphs;
- Use DTP software to create a poster;

- Collect appropriate resources;
- Insert text and images;
- Format text appropriately for the purpose and audience;
- Manipulate images to prepare for use;
- Consider the audience when selecting material to include;
- Structure a reasoned explanation using text and images.

### Curriculum Links

<p><b>NC Geography</b> Geographical enquiry skills 1bce 2abcdef Knowledge and understanding of patterns and processes 4ab Breadth of study 6c</p> <p><b>QCA Geography</b> KS2 Unit 14 Investigating rivers</p>	<p><b>NC Science</b> Ideas and evidence in science 1ab Investigative skills Planning 2abc Investigative skills obtaining and presenting evidence 2efgh Investigative skills Planning 2ijl Communication 2a Life processes 1c Living things in their environment 5bc</p> <p><b>QCA Science</b> KS2 4B Habitats KS2 5B Lifecycles KS2 Unit 6A Interdependence and adaptation KS3 7D Variation and classification KS3 8D Ecological relationships</p>	<p><b>NC ICT</b> Finding things out 1abc Developing ideas and making things happen 2ac Exchanging and sharing information 3ab Reviewing, modifying and evaluating work as it progresses 4ac</p> <p><b>QCA ICT</b> KS2 4A Writing for different audiences KS2 5D Introduction to spreadsheets KS2 6B Spreadsheet modelling KS3 Unit 3 Processing text and images KS3 Unit 4 Models - rules and investigations</p>
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### Expectations

The students will use real data collected at the river site to create a river profile and use this data to inform the production of a poster, demonstrating their understanding of the needs of living creatures within an ecosystem.