

Amazing Adaptations!



Amazing adaptations encourages children to learn about the ways in which animals that live in, or near, the river are adapted to their habitat.

Learning outcomes:

The children will learn about:

- The variety of animals that live in and around rivers
- How animals are adapted to live in or near rivers
- How features such as colouration, body shape and body structure enable animals to survive in a river habitat

Resources:

- Felt pens
- Paper
- White wax candles
- Pipettes/water droppers
- Cardboard tubes
- Natural materials (e.g.leaves/sticks)
- Tissue paper
- Pipe cleaners
- River background images
- Colouring pencils
- Otter diagram – cut and stick adaptations
- Glue

Activities

1. Make your own cased caddisfly.

Show children an image of a cased caddisfly and explain how it constructs its case from materials in the river to protect itself from predators.

Give each pair a cardboard tube, glue and choice of natural materials to construct their own caddisfly larvae case. They can then use paper and pipe cleaners to create a larva to live in it.

2. Felt pen waxed feather investigation

Draw two feathers using felt pens on a piece of paper. Rub the surface of one feather drawing with a wax candle. Use a water dropper/pipette to drop water on the two images and discuss the differences observed.

3. Design a fish to camouflage with its background

Provide each child with an outline of a fish. They should choose a background and then colour their fish to blend in with its background. Discuss why camouflage is an important survival adaptation.

4. Label an Otter diagram - identify the features that allow it to survive in the river.

Provide each child with the Otter image and labels, along with glue and scissors. Children colour in the otter and label the adaptation features.

Curriculum links

These activities link to the following parts of the Science National Curriculum:

• Key Stage 1:

- Working scientifically
- Animals including Humans
- Living Things and their Habitats

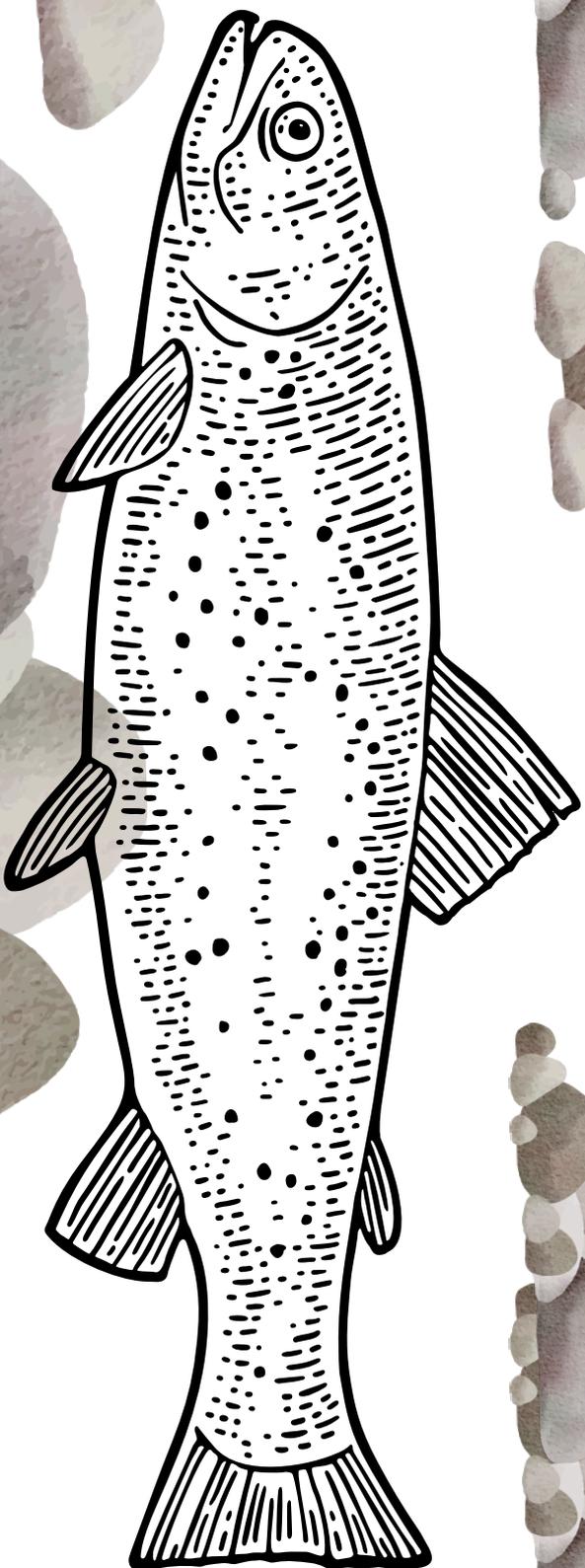
Key Stage 2:

- Working scientifically
- Animals including Humans
- Living Things and their Habitats
- Evolution and Inheritance.

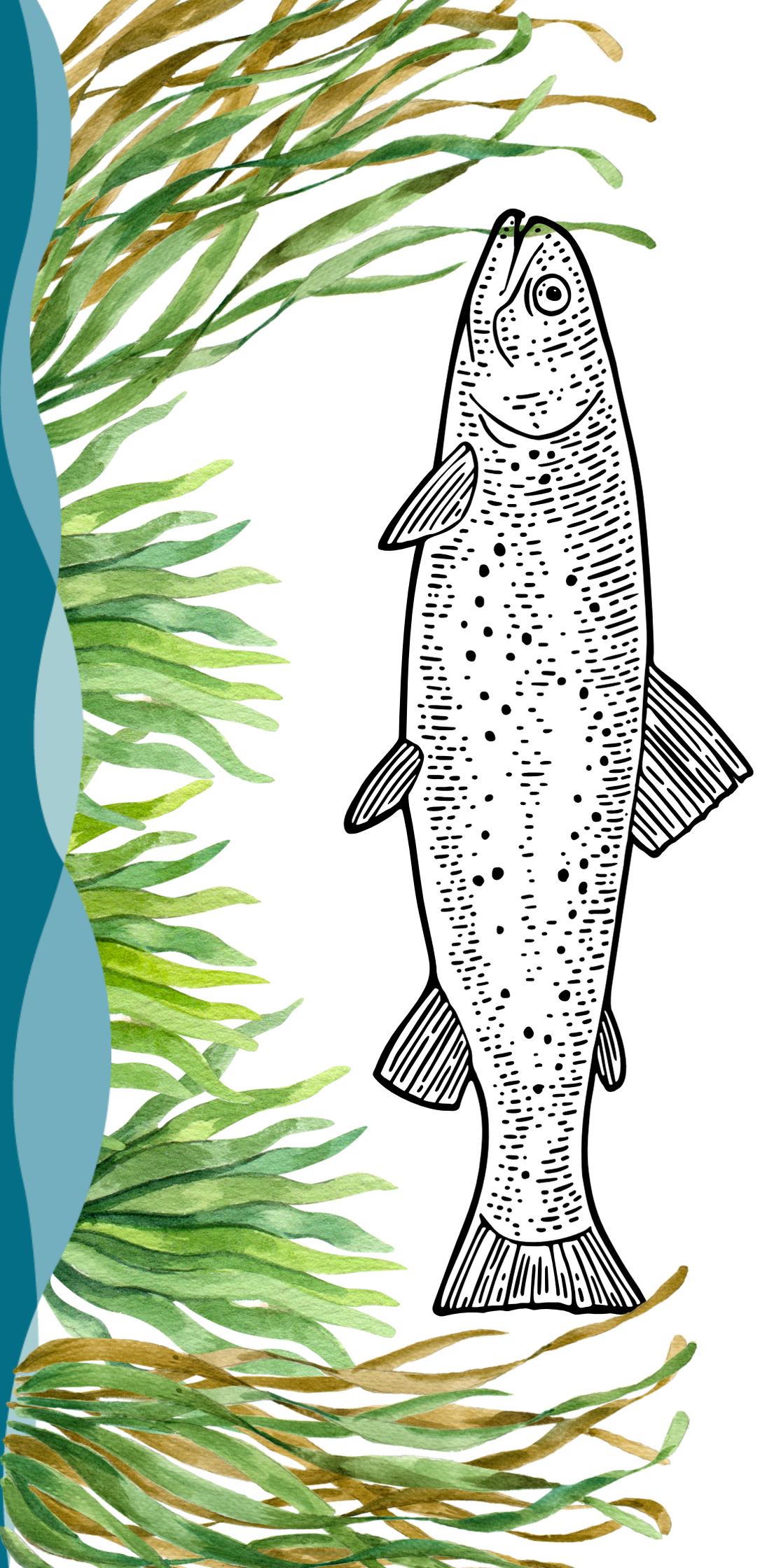
Key Questions:

1. What adaptations does each animal have that enable it to survive (body shape, colour, body covering)?
2. How does each animals' colour help it to survive (predation avoidance, predation success)?
3. What are the features of each animal that make it suited to living in a river?

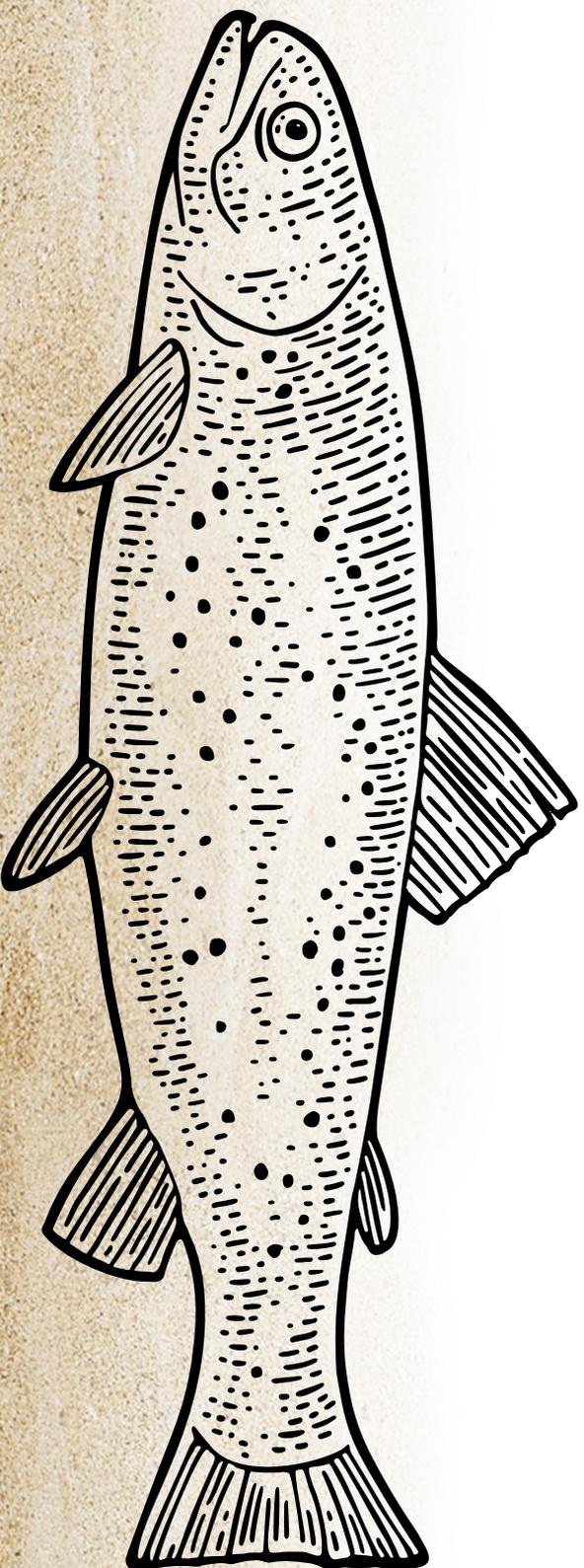




© Produced by Westcountry Rivers Trust,
2025 in consultation with N. Collins, Fellow
of the Primary Science Teaching Trust.



© Produced by Westcountry Rivers Trust,
2025 in consultation with N. Collins, Fellow
of the Primary Science Teaching Trust.



© Produced by Westcountry Rivers Trust,
2025 in consultation with N. Collins, Fellow
of the Primary Science Teaching Trust.



© Produced by Westcountry Rivers Trust,
2025 in consultation with N. Collins, Fellow
of the Primary Science Teaching Trust.

Otter Labels

Thick, waterproof fur - to keep warm in the water

Webbed feet - to help them swim

Long, sensitive whiskers - to help them find food

Streamlined body shape - to help them swim underwater

Otters can close their ears and their nose underwater