

# Chalk Stream Challenge

## How to Earn Your Badge



### How to earn your badge:

- Everyone needs to complete Section 1
- Under 7s need to complete at least one other part from sections 2, 3, 4 and 5
- 7 – 11 year olds need to complete at least two other parts from sections 2, 3 and 5 and one other part from section 4
- Over 11s should complete at least two other parts from sections 2, 3, 4 and 5

### Section 1 - Get to know your local chalk stream (to be completed by everyone)

1. Walk a stretch of chalk stream local to you.

I walked from \_\_\_\_\_ to \_\_\_\_\_

Number of steps \_\_\_\_\_ or the distance \_\_\_\_\_

I completed activity numbers \_\_\_\_\_



**Southern  
damselfly**

### Section 2 - River Geography

2. Time the flow of the river at various points using a leaf or small twig (remember your stretch of stream may not be deep enough for anything bigger!). Where does it flow fastest? Slowest? What does the river bed look like if you can see it?

**You will need: something light to float, a stopwatch (or you could count the seconds by saying 'one stickleback, two stickleback' etc)**

3. How clear is the water? Dip a container into the stream (see photo gallery) and view the water.

**You will need: a small container, e.g. a bucket or butter or ice cream tub**

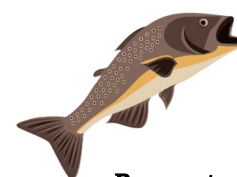
4. Investigate [chalk](#). How does this sedimentary rock affect our local rivers? Find a piece of chalk outside and place it in a bucket of water, what do you see?

**You will need: a small container (clear is best), a piece of natural chalk**

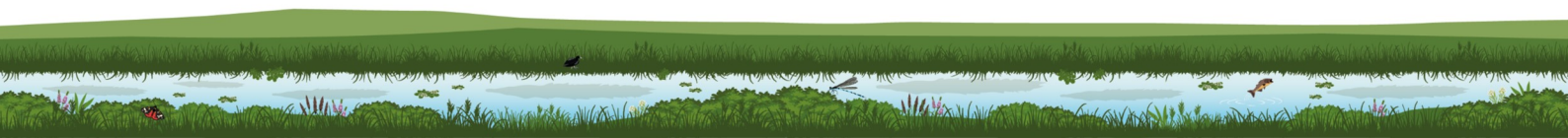
5. Observe a winterbourne at its source at various times of the year, or look at photographs and note the differences and in which month they occur.

**You will need: a camera or smartphone, or a sketchbook and pencil**

6. Find out why watercress grows well in chalk streams?



**Brown trout**



### Section 3 - River life

7. Spot watercress growing. **Do not eat any** - watercress has a close relationship with the water in which it is growing and this could contain contaminants that, if ingested, may make you ill. Take a photo or make a drawing.
8. From the bank, or even better, from a bridge, look down into the water and note any fish you see. What size and colour are they? Try to identify them.
9. Look at the plants growing in the stream and the materials making up the stream bed. Draw the different types and see if you can name any.
10. Using an ice cream tub or similar scoop up some water and look at any minibeasts. Draw one with no legs, one with two legs, one with four legs and one with more than four legs. Have a go at identifying them later if you do not recognise them. Why are these important to the fish?

**You will need: a small container, e.g. a bucket or butter or ice cream tub, a small fish tank net may be useful**

11. On the banks and around the stream find and draw any flowering plants and trees. Identify them later if you do not recognise them. You may be lucky enough to see other creatures including birds such as herons, little egrets or kingfishers, but also look for evidence of animal life such as holes in the bank (water voles or rats), nests and droppings. You may also see signs of human use, such as footprints, litter or a dog dip.

### Section 4 - River industry and land use

12. Make a note of any manmade items or structures you have seen whilst exploring your local chalk stream. Have you seen a sluice, old machinery, manmade brick or stonework, watercress bed surround, bridge or a mill?
13. Draw or photograph a watercress bed either in use or derelict. If you are local to Alresford, attend the [Watercress Festival](#) in May.
14. Investigate current land uses found on both the headwater streams and the rivers they feed into (the Test and Itchen). Some ideas are: watercress production today; tourism e.g. the Watercress Line or Whitchurch Silk Mill; drinking water abstraction; farming; nature reserves; fishing; transportation of goods. **A map would be useful.**
15. Investigate traditional uses of both the headwater streams and the rivers they feed into. Examples could be: fulling, corn, silk and paper mills; eel trapping (see the [Alresford Eel House](#)); early grass for cattle on the water meadows; sheep dips. Research at least two of these and visit as many as you can on your walk - you could also have a go at making your own model water wheel (there are lots of ideas online). **A map would be useful.**



**European eel**

### Section 5 - River fun

16. Play Pooh sticks from a suitable bridge.
17. Taste watercress (shop bought only) in a sandwich you have made. What other fillings could you have with it, is there anything else you could make with watercress as your main ingredient? Research some different recipes.
18. Hold a race with leaves or boats made from natural materials. **Some natural twine may be useful.**
19. Make a paint chart using the different colours found either along your walk or at one point by the river. Can you find shades of browns and greens? Give the colours names related to the plants or the area around them. **You will need: a piece of strong white card, your finger for smudging the colours in**
20. Draw a map or picture and label all the features you have learnt about that may be found in or around the streams that begin as winterbournes.

