How does water get into rivers?

The Rivers Trust

Scout uses her umbrella to shelter from the rain, but why is rain important and how does it impact on rivers?

Key Question

Key Stage 1:
How can you measure rainfall?

Key Stage 2:
How does rainfall affect river flow?

Activity

Make a Rain Gauge

1. Cut around the diameter of the plastic bottle approximately two thirds of the way up
2. Put a small number of pebbles/stones in your bottle
3. Remove the lid and turn the top section of the bottle upside down and inside the larger section. Fix this in place with a small amount of tape.
4. Cut a long piece of masking tape and stick it to the outside of the rain gauge
5. Line up a ruler with the bottom of the rain gauge and make a scale in centimeters up the side of the bottle on the masking tape.
6. Discuss with the group the best position for the rain gauge

Equipment:

- Plastic bottle
- Pebbles/stones or marbles
- Ruler
- Masking tape
- Sellotape
- Marker pen (water resistant)

Top Tip:
Put the rain gauge in a spot sheltered from wind so it won't topple over

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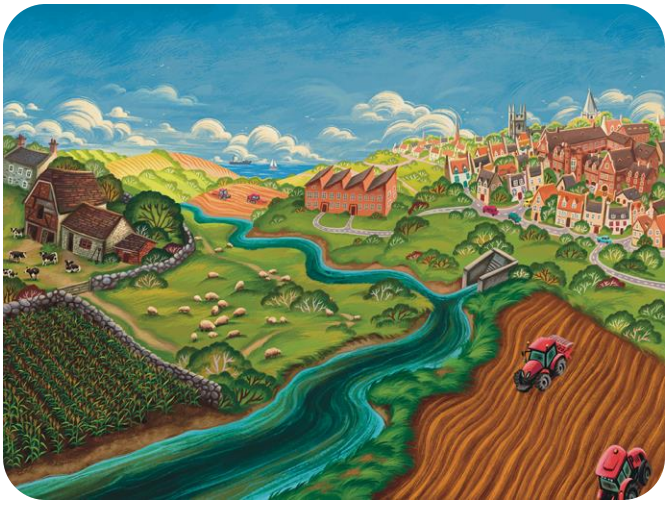
Key Points:

- Water runs into rivers through various routes, at different speeds
- How quickly water gets into rivers can affect river flow
- Higher amounts of rainfall increases the river volume and therefore flood risk



More questions to ask:

1. Why is it important for us to measure rainfall?
2. What effect do you think higher rainfall has on rivers?
3. What happens to our rivers when we get low levels of rainfall?
4. What are the issues caused by high rainfall?
5. How can we slow the flow of water into rivers?

Further Resources:

For more activities, worksheets and resources, visit theriverstrust.org by scanning Scout's QR code!

With thanks to: Foresters Friendly Society

Apply to different learners:

1. **More support**: Explain how rainfall gets into rivers.
2. **Challenge:**

- Is it just rainfall that supplies rivers with their water? (springs, bogs, run off etc.)
- Why might we want to slow the speed that water gets into rivers?

Other activities you could try:

1. Build a “leaky dam”
2. Map the drainage in your school
3. Do the “Journey of a river” activity using guttering, pipes or plastic sheeting. Measure the speed of a float or handmade mini boat

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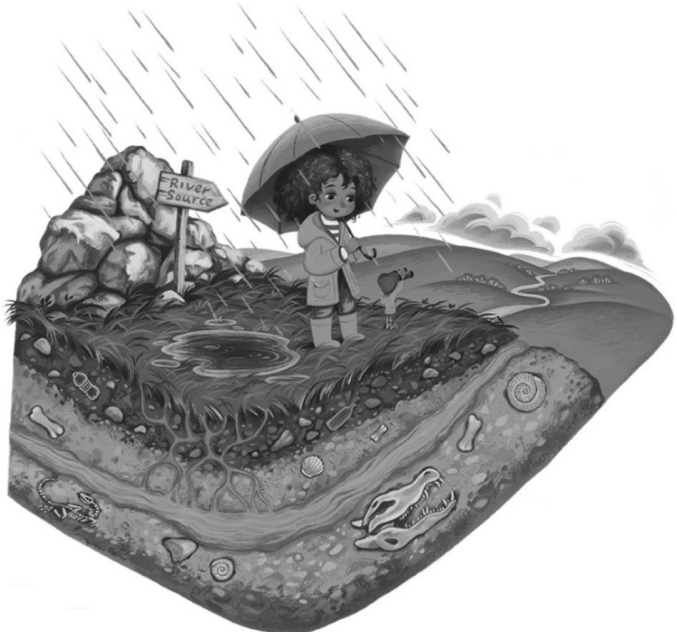

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