

# WVS EDUCATION KS2 SCIENCE LESSON PLAN

The problem with plastic: How changes in environments harm animals.

Phase	Key Stage 2
Subject	Science/The World Around Us
WVS goal	To take action for the welfare of animals
Curriculum Links	<p><b>England</b> KS2 Science: Recognise that environments can change and that this can sometimes pose dangers to living things</p> <p><b>Wales</b> KS2 Science: How humans affect the local environment, e.g. litter, water pollution, noise pollution</p> <p><b>Northern Ireland</b> KS2 The World Around Us</p> <ul style="list-style-type: none"> <li>• The effect of people on the natural and built environment over time</li> <li>• The effects of positive and negative changes globally and how we contribute to some of these changes</li> </ul> <p><b>Scotland Second</b> Sciences</p> <ul style="list-style-type: none"> <li>• I can analyse how lifestyles can impact on the environment and Earth's resources and can make suggestions about how to live in a more sustainable way</li> <li>• I can report and comment on current scientific news items to develop my knowledge and understanding of topical science</li> </ul>
Links to Sustainable Development Goals	SDG 15 – Life on Land

## OVERVIEW

In this lesson, children will:

- Understand the effect of plastic pollution on the environment
- Discover the harm plastic can have on an animal's welfare
- Consider that their actions have an impact on the environment
- Appreciate the need to reduce their use of plastic

## LESSON RESOURCES

**Visual glossary:** This printable lists the vocabulary associated with the lesson and can be provided for additional support.

**Printable 1** – Problem with plastic vet reports

**Printable 2** – Problem with plastic recording sheet

**Printable 3** – Pledge against plastic template

## LESSON OVERVIEW

<p><b>Part 1: Discover the issue</b></p>	<p>Share the entry ticket question with children: How sure are you that you can explain how plastic pollution changes environments and harms living things? Children can give their answers using the scale 1 to 4 on their fingers, indicating how sure they feel.</p> <p><b>Picture from a vet:</b> Introduce the photograph showing animals eating waste in a street in India. Use the Project Zero Thinking Routine, developed by Harvard, to help children explore their thoughts and questions about what they can see. Further information about using this Thinking Routine can be found here: <a href="https://www.harvard.edu/education/learning/learning-science/learning-science-projects-zero-thinking-routine">See Think Wonder.pdf (harvard.edu)</a></p> <p><b>Vet report:</b> Introduce the vet report from a WVS vet working in India. This scenario introduces the children to the fact that animals are suffering because of the plastic waste left by people.</p> <p><b>Exploring the issue:</b> Children take part in a discussion about the properties of plastic where they consider the positive and negative properties of plastic. Useful properties include the fact that it is strong, durable, waterproof and lightweight. However, these useful properties also cause problems for the environment as plastic is not biodegradable and lasts for a long time. The children watch a video, to discover that if plastic is not used and disposed of responsibly, it can be very harmful in the environment.</p>
<p><b>Part 2: Join the adventure</b></p>	<p><b>Question to investigate:</b> Pose the question 'How does plastic pollution change environments and harm living things?'</p> <p>Children search through vet reports (<b>Printable 1</b>) to uncover information about the impact of plastic on environments and animals. Suggestions for running this activity: Print and hide the vet reports in an outdoor area, the classroom or hall for children to find and read. Alternatively, each classroom table could have a copy of one of the reports. Paper and coloured pens could be placed in the middle of the table. Children could rotate around the tables, making notes on the central paper to explain what they have discovered.</p> <p>Children can then record their learning using the recording sheet, <b>Printable 2</b>.</p>
<p><b>Part 3: Be the change</b></p>	<p>Children discuss the changes that they could make to protect animals from harm caused by plastic pollution. E.g. reducing their use of single-use plastic, packing a waste-free lunch, saying no to disposable straws, using reusable bags and making posters to tell people about the issues etc.</p> <p>Children make a class or individual pledge against plastic, explaining the actions that they will take to reduce the harmful effects of plastic on animals. For example, 'I will carry a reusable water bottle' or 'I will try to avoid buying plastic toys.' A suggestion is that children can then place their pledge inside a plastic bottle, which can be hung up in the classroom for an eye-catching display.</p> <p>Children/teachers can record class ideas on <b>Printable 3</b>.</p> <p>Share the exit ticket question with children: How sure are you that you can explain how plastic pollution changes environments and harms living things? Children can give their answers using the scale 1 to 4 on their fingers, indicating how sure they feel.</p>