

## Spring Clean Week 2025: Investigate a piece of litter



**Stage:** P4-S2



**Time:** 2-3 hours

**Purpose:** We want to help young people understand the issues around litter and waste and give them tools to help tackle problems in their local area. In this activity, pupils will conduct a mini scientific investigation into a piece of litter they find outside.

### Introduction to the activity

Following on from our Live Lesson on the travels of a crisp packet, we invite pupils to find a piece of litter in their local area and investigate it. Prior to finding the piece of litter we recommend conducting a risk assessment with pupils to help improve their risk management (see below). Once pupils have found a piece of litter, we invite them to investigate where it has come from, including hypothesis generation and testing.

### Part 1: Make sure you are safe

Ask pupils to complete the litter pick risk assessment on page 2 of this resource as a group. When discussing the risks of litter with pupils you could consider the following:

- Where is the litter located? Make sure pupils do not put themselves in a dangerous position to reach a piece of litter.
- What is the litter made from and could harm someone? For example, they may find metal with sharp edges.
- What the litter might have on it or contain? For example, it may be coated in harmful bacteria or contain rotten food.

### Part 2: Find a piece of litter

Take pupils on a litter pick in or around your school grounds making sure they follow the guidance from their risk assessment. Ask pupils to choose one of the pieces of litter that they find to investigate further. Pupils could select a piece of litter individually or in groups. Encourage pupils to select a wide variety of types of litter to support later discussions.

### Part 3: Generate your hypothesis

Ask pupils to examine their piece of litter (wearing gloves if using their hands). Ask them to look for clues about where it might have come from and how old it might be. They can look for clues such as branding and best before dates to try and age the item.

Ask pupils to formulate a hypothesis about where the item may have come from and how old it is based on their initial findings.

### Part 4: Test your hypothesis

Ask pupils to conduct online research to find out how old their item is and where it may have come from using the information they have gathered. Pupils could look at a map of their local area to try to identify where the item may have come from. They could think about how weather may have affected its travels and if it could have travelled by water (look at prevailing winds, location of water courses). They can also look at local amenities that might have supplied the item.

Ask pupils to summarise the information they have found and present it to the rest of the class. Discuss ways in which we could prevent these items being littered in future.

**Litter pick risk assessment**

<b>Where will the litter pick take place?</b>					
<b>Who will take part in the litter pick?</b>					
<b>What are the benefits / good points about doing the litter pick?</b>					
<b>What are the risks of doing the litter pick? (you could colour code these with traffic light colours based on how severe the risk is)</b>					
<b>What can you do to reduce the risks you have identified? (before and during activity)</b>					
<b>Use this box to record any unexpected risks that crop up during the activity</b>					
<b>Date and initialled</b>					

Notes: For younger pupils, it may be helpful for the educator to lead a discussion and complete the risk assessment as a class rather than asking pupils to complete it themselves.

For older pupils, the form can be completed through group discussion and collaboration.

The box on unexpected risks can be updated afterwards if things crop up during the activity. The form can be dated and initialled as updates are made.