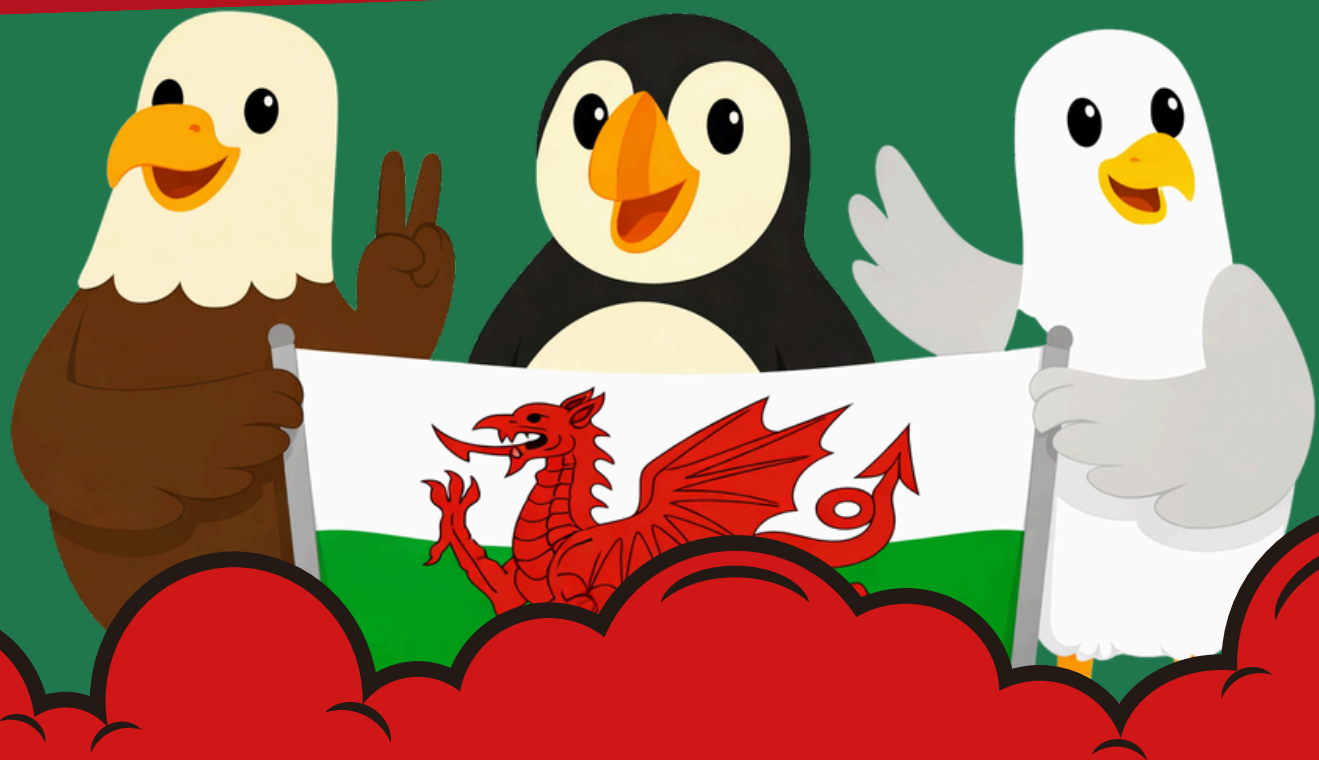


THE POLLUTION DETECTIVE CHALLENGE

PRIMARY SCHOOL ASSEMBLY PLAN



NO SMOKING DAY
11TH MARCH 2026

BEFORE YOU START

Split into 3 Teams: Eco Eagles | Puffin Protectors | Seagull Scouts (Use house colours, year groups, hall sections or stickers.)

Equipment Required: Screen for presentation, whiteboards and pens (for Guess the Mess), space at the front for volunteers.

Optional: A scoreboard on flipchart, real containers for Butt Busters (crisp packet, Pringles tube, medium McDonald's cup).

Volunteer Notes: Maximum 3 pupils standing at once, one point per correct answer.

After the Session: (Optional): Display the signed Pollution Detective pledge in school. Schools may email a photo to ASH Wales to confirm participation. Communications@ashwales.org.uk

SCRIPT

SLIDE 2: Hands up if you like solving mysteries? Today you have a very important mission. You are going to complete five detective challenges, uncover three big clues, and by the end, you'll graduate as official Pollution Detectives. Are we ready? Quick question... who here loves Wales? Brilliant. Today we're protecting the places we love. Let's begin.

SLIDE 3: Detectives always work in teams. Today we have three brilliant squads: Team Eco Eagles Team Puffin Protectors Team Seagull Scouts Let's hear your best team cheer! Eco Eagles, let me hear you! Puffin Protectors! Seagull Scouts!

SLIDE 4: Challenge 1 is called... Guess the Mess! This is your first mystery. I need two volunteers from each team. **[Assembly shortcut: one volunteer per team]** You have 30 seconds to guess one of the top five most littered items. Write down one answer on your whiteboard.

SLIDE 5/6: Let's see what the top five most littered items actually are. Look at these... food wrappers, bottles, fast food packaging... But detectives... What's the number one most littered item of all? Pause... Cigarette butts and packaging. Well done everyone, great guesses.

SLIDE 7: So detectives... clue number one is uncovered. Cigarette butts and vape litter are everywhere. But why are there so many of them? And why does this matter today?

SLIDE 8: We're marking No Smoking Day. It's a moment when people are encouraged to think about quitting smoking and getting support. And one reason that matters is what we've just discovered. Cigarette butts are everywhere, and they affect the places we love too. So detectives... let's investigate what's really inside a cigarettes.

SLIDE 9: A cigarette has three main parts. The paper on the outside. The tobacco inside. And this small bit at the end called the filter. Now detectives... this little white bit at the end? That's the filter. Most people think it's cotton. It's not. It's plastic. And when it's thrown on the ground... That plastic stays there. For years.

SLIDE 10: How many chemicals do you think are inside cigarette smoke? One guess per team. Eco Eagles? Puffins? Seagulls? Great guesses. Ready for the truth?

SLIDE 11: There are more than 7,000 chemicals in cigarette smoke, many harmful to people and nature. So detectives... Let's test your chemistry skills.

SLIDE 12: Challenge 2... Chemistry Showdown! This time, I need one detective from each team to stand at the front. **(Choose 3 pupils.)** You are the Chemistry Captains. When a chemical appears on the screen, you have five seconds to decide. Is it found in a cigarette... or not? You can quickly ask your team for help. Ready, captains?

SLIDE 13-20: [Answers Arsenic Yes | Table Salt No | Formaldehyde Yes | Benzene Yes Tar Yes | Vitamin C No | Ammonia Yes | Milk No]
That's thousands of chemicals, and when butts are dropped, those chemicals can leak into soil and water.

SLIDE 21: Okay, let's zoom back in on the filter because detectives... that's our second clue. Cigarette filters are plastic and full of chemicals.

SLIDE 22: When cigarette filters were invented, the people who make cigarettes told the world: "These filters trap harmful chemicals." "They protect your lungs." "They make smoking safer." Now detectives... Why do you think they wanted people to believe that? **[Take a couple of answers.]** Exactly... so more people would buy them. Here's the truth.

SLIDE 23: Filters are plastic. They don't block harmful chemicals. They sit in the environment for years, leaking pollution into soil and water. That's why cigarette butts are such a huge problem. Right detectives... Time for Challenge 3.

SLIDE 24-32: Challenge 3 is... Butt Busters! Yes, you can giggle at the name. I need one volunteer from each team. **[Assembly shortcut: do two containers only]** You will guess how many cigarette butts could fit inside everyday containers. Closest guess wins a point. Teams, shout Higher or Lower to help! Ready? **[Answers:** Mc Donald's Cut: Holds 375 butts Crisp Packet: Holds 420 butts Pringles Tube: Holds 700 butts] That is a lot of pollution from tiny little litter. So how big is the problem in Wales?

SLIDE 33: In Wales... If you walked down 10 streets, you would see cigarette butts on about 8 of them. That's nearly every street. And here's something shocking. Just one tiny cigarette butt can make enough water dirty to fill 200 glasses. Imagine 200 cups of water lined up in this hall... All made dirty by one small bit of litter.

SLIDE 34: Would you want to drink or bathe in that water? No way. But wildlife has no choice.

SLIDE 35: Birds, squirrels, sea creatures... They mistake cigarette butts for food. They can choke. They can get sick. And the plastic filters pollute the places animals live. Forests, parks, beaches, oceans. So detectives... Here comes clue number three.

SLIDE 36: Clue number three: wildlife suffers from this litter, often mistaking it for food.

SLIDE 37: Challenge 4: Detective Decompose Dash! This time, we're going to do a quick-fire mystery round. To keep it fair, I need one detective from each team to stand up. [**Choose 3 pupils, one per team.**] Everyone else stays seated and helps by whispering or pointing. I'll show two pieces of litter. Each captain will choose which one disappears first. If your detective gets it right, your team wins a point.

SLIDE 38: Before we start... Does anyone know what the word decompose means? Decompose means how long something takes to break down and disappear. Some things take weeks... Some take years... Alright detectives, let's dash

SLIDE 38-44:

Q1: Paper towel or cigarette butt? Reveal: Paper towel 4 weeks. Cig butt up to 15 years.

Q2: Banana peel or disposable nappy? Reveal: Banana 6 weeks. Nappy 30 to 40 years.

Q3: Tin can or vape? Reveal: Tin can 50 years. Vape 600 plus years.

Some litter lasts longer than your whole lifetime. That's why this matters so much.

SLIDE 45: This timeline shows it clearly: some litter disappears fast, but cigarette butts and vapes stay for years.

SLIDE 46: Vapes are another growing litter problem. They're plastic and contain batteries. When thrown away, batteries can leak into soil or even cause fires. Detectives, we are lucky in Wales. We have castles, coastlines, mountains. We don't want plastic and battery waste lasting longer than our history.

SLIDE 47: One vape could be lying around for over 600 years. That's almost as long as a castle has been standing in Wales. That is a very long time for something so small.

SLIDE 48: Detectives... we cracked the case. We discovered: Cigarette butts are the most common litter in Wales. Filters are plastic pollution. Wildlife is harmed. Vapes last for centuries. That's why No Smoking Day matters. Quitting helps people... and it helps protect Wales.

SLIDE 49: Alright detectives... It's time to reveal the winning team! Huge cheers for Eco Eagles! Big applause for Puffin Protectors! Massive cheer for Seagull Scouts! And congratulations to today's winners... But the real victory is that every single one of you helped solve the mystery.

SLIDE 50: Detectives... final mission. Repeat after me. I promise to look after the planet. I will help protect wildlife. I will keep beaches and parks clean. I will always put litter in the right bin. I will help Wales stay smokefree. Well done Pollution Detectives. Case closed.





CERTIFICATE OF ACHIEVEMENT



HAS COMPLETED THE OFFICIAL POLLUTION DETECTIVE TRAINING

With teamwork, curiosity, and care for the environment, this Detective is now ready to protect beaches, parks, and wildlife across Wales!

Suzanne Cass
Chief Executive Officer - ASH Wales

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Help to Quit Smoking (Age 12+)

Freephone: 0800 085 2219

Visit: helpmequit.wales