





Ariennir gan **Lywodraeth Cymru** Funded by **Welsh Government** 







# **Background information**

Litter is something that most children are aware of from a young age. Unfortunately, it is all around them, but it is something that they can make a difference to and feel empowered doing so. What children may not realise is that you cannot see all litter with the naked eye. When plastic breaks down it does not disappear, it just gets smaller and smaller, and even a very small particle can be harmful to a very small creature. They are eaten by natures invertebrate scavengers both on land and in the sea and are then passed down the food chain and can even be found in the foods we eat. We need to be aware of the harm micro plastics can do and take steps to stop them getting into the food chain.



# Climate perspective

Plastic is one of the most persistent pollutants on Earth. It can last for 400 years or more. And at every step in its lifecycle, even long after it has been discarded, plastic creates greenhouse gas emissions that are contributing to the warming of our climate. As it breaks down in the environment it creates micro plastics which are polluting the

ground and sea. It is important that we cut down on our use of plastic, particularly single use items. As children begin to realise what happens to items once we have finished with them, hopefully they will look at their own use of items and how they are disposed of.

# A Micro Plastic Food Chain Foundation Phase

Microplastics are in so many things we use that the ground is full of them. This activity shows how these microplastics can travel through the eco system and can be found in many animals.

#### Materials needed:



- Earthworm picture
- What eats an earthworm cards
- Green and pink coloured paper cut into small pieces as tokens, you will need a lot more green than pink. The green represents natural materials and the pink are plastic litter (Allow approximately 5 tokens per child)
- A stopwatch

# Step 1

Begin by showing the picture of the earthworm and explain how it is nature's primary recycler, eating whatever decaying matter it finds in the ground and making it into soil. Usually this is leaves and dead plants but if it comes across micro plastics breaking down in the soil these get eaten as well. Once the worm has eaten them, they remain in its body.



#### Step 2

Scatter the tokens around your area. Tell the children they are going to be worms and must collect as many tokens as they can in a set amount of time (this will vary according to the size of your space, number of children and number of tokens).



#### Step 3

When they have finished collecting, they need to sit in a circle and look at the tokens and maybe count them depending on ability. Most will have a mix of colours. They can put these tokens in front of them.

### Step 4

The teacher is a mole who eats a lot of earthworms every day (moles eat almost their body weight in worms a day).

Moles have a great sense of smell and very sensitive whiskers so they can sense a worm wriggling around.

Ask the children to sit very still. The teacher mole is going to be watching and every time a worm moves, they will gobble up the worm by eating the tokens and saying munch, munch. When about half the group has been eaten you can declare that the rest of the worms are safe and will live to wriggle another day.

## Step 4

Have a look at the tokens that the mole collected. Is there a mix of colours? Remind the children that if this was happening for real then the pink would be bits of plastic that are now inside the mole. They can then discuss why plastic should not be dropped as litter and we should try to use less of it.

# **Curriculum Links**

Area of Learning and Experience - Humanities

#### **Statement of What Matters:**

Our natural world is diverse and dynamic, influenced by processes and human actions.

Human societies are complex and diverse, and shaped by human actions and beliefs.

## Next steps and other ideas

• Investigate how this process happens with marine animals and how plastics enter our food chain.

#### **Useful Websites:**

https://www.kidsagainstplastic.co.uk/

https://www.natgeokids.com/uk/kids-club/cool-kids/general-kids-club/plastic-pollution/

























