Lesson 4: What goes in, must come out - worms!

WE ARE LEARNING THAT: Whatever we put into our hearts is what comes out.

BORIS ASKS:  
Can the children explain how the worms eat soil to produce good soil?  
Can the children relate what is happening with the soil, to their hearts?

RESOURCES: Earthworms; soil; sand; a spray bottle; large container with a lid; 2 cardboard rolls; carrots; lettuce; coffee grounds.

Explain that being HeartSmart means we are careful what goes into our heart and mind, as well as what comes out. To teach this principle, get the children to study the life of earthworms. To create a simple ‘wormery’ habitat to observe your worms, you will need:

- 2 -3 earthworms
- Soil
- Sand
- A spray bottle
- Jar or container with lid
- 2 Cardboard rolls
- Carrots, lettuces, coffee grounds

Instructions:

Take the children out into the school grounds to find some worms. Place them in a container ensuring you have poked some holes in the lid to let air in. Insert one cardboard roll into the other and cut it to fit inside your container. Now cover the entire roll with packing tape to protect it from the water - by putting this in the middle the worms will stay where you can see them better. Put your taped up rolls in your container then alternate filling it with soil and sand (if you have different coloured layers it will help you see your worms more clearly. It will also help you view how they mix the soil). After filling the container with your soil and sand, add your worms. Wait a few minutes until the worms burrow under the soil then add some worm food (carrots, lettuce, and coffee grounds.)

HERE ARE SOME WAYS IN WHICH THIS RELATES TO THE CURRICULUM:

R&HE
MW1. that mental wellbeing is a normal part of daily life, in the same way as physical health

PSHE
H2. to recognise what they like and dislike, how to make real, informed choices that improve their physical and emotional health, to recognise that choices can have good and not so good consequences

BIBLE REFERENCE
A good person has good things saved up in his heart. And so he brings good things out of his heart. But an evil person has evil things saved up in his heart. So he brings out bad things. A person speaks the things that are in his heart. Luke 6:45

SMSC
The spiritual development of pupils is shown by their:
- willingness to reflect on their experiences

The moral development of pupils is shown by their:
- understanding of the consequences of their behaviour and actions

SIAMS
Strand 2: Wisdom, Knowledge and Skills
Strand 3: Character Development: Hope, Aspiration and Courageous Advocacy

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Leaving the wormery somewhere the children can observe it. Don’t forget to spray water on your habitat every couple of days - worms like it damp, but not too wet, so don’t over do it. You also need to remember to add more food when they have run out.

As children observe the worms help them understand that they eat soil and produce even more healthy soil. As the soil goes through them and out the other end, they add extra nutrients to it. The worm castings make even more amazing soil. For this reason, lots of gardeners will use worms to improve their compost. The worms also aerate the soil by digging tunnels. This brings plants the oxygen they need to grow.

**FUN FACT:**

Worms have 5 hearts!! And they produce their own bodyweight in castings every day!

Remind the children that what we take in, will come out. If we take in good things, good things will come out of us. If we fill ourselves with nasty thoughts, unkind words, or wrong habits, those will come out in our lives too.

**HERE ARE SOME WAYS IN WHICH THIS RELATES TO THE CURRICULUM:**

**R&HE**

- **MW2.** That mental wellbeing is a normal part of daily life, in the same way as physical health

**PSHE**

- **H2.** To recognise what they like and dislike, how to make real, informed choices that improve their physical and emotional health, to recognise that choices can have good and not so good consequences

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