

# SOIL YOUR UNDIES CHALLENGE

## The Great Worm Hunt activity sheet



## The Great Worm Hunt

### What do we do?

1. To undertake this experiment, we'll need a couple of things:
  - i. a watering can
  - ii. Around 30mL of dishwashing liquid
  - iii. 2 tbs mustard powder (although you may come up with alternatives, like curry powder or chilli flakes to see how they go), and
  - iv. a quadrat. The quadrat could be an old wire coat hanger bent into a square or a piece of string/rope 2 m long that you use to make a square pattern on the ground. (If you like math and algebra then it might be fun to think about the length of the rope and what happens to the area it encloses depending on whether you use it as a square or a circle.)
2. Ideally you want a bit of moisture in the soil, so this is best done after we have had some rain, because when it is dry most native Australian earthworms tend to burrow deeper into the soil.
3. Next, establish your hypothesis. This is what you think the outcome of your experiment will be. Ask yourself, what will happen when you pour the different liquids onto the soil? Will you recover earthworms and will the numbers differ between the treatments? If so, which solution will give you the most or the least? This is just an educated guess.
4. Put down your quadrat, fill your watering can with one of your solutions (water, water and mustard powder, and water and dishwashing liquid).
5. Next, pour the entire watering can over the area the quadrat encloses.
6. Over the next 5 to 15 minutes look at the soil surface and recover the earthworms that come up. Count them and perhaps give them a rinse in water before returning them to another part of the garden.
7. Do this for each of your test solutions. What did you find? Was your hypothesis correct or did something else happen?

Treatment	Number of worms
Water	
Water & Detergent	
Water & mustard	