

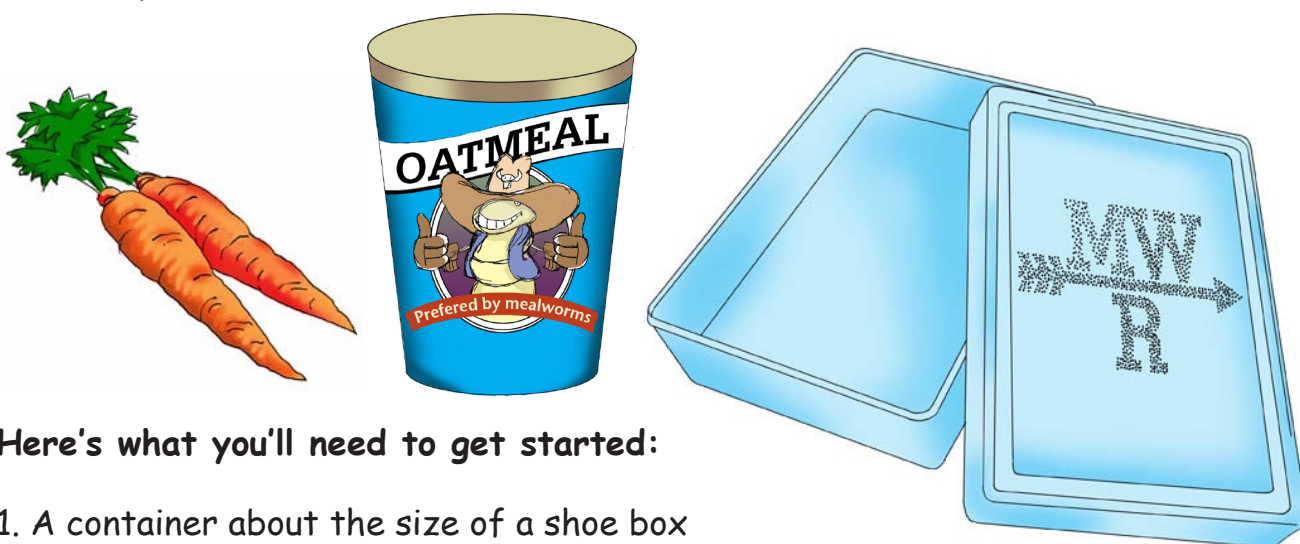


# Mealworm Ranch

An experiment in scientific observation

You have probably heard about caterpillars turning into butterflies or tadpoles turning into frogs. You may have even heard about frogs turning into princes, but that happens only in fairy tales. A lot of animals start life in one form and change into a completely different shape when they become adults. Scientists call this process metamorphosis (met-a-MORF-a-sis).

Mealworm Ranch is a project that will let you see first-hand how metamorphosis works.



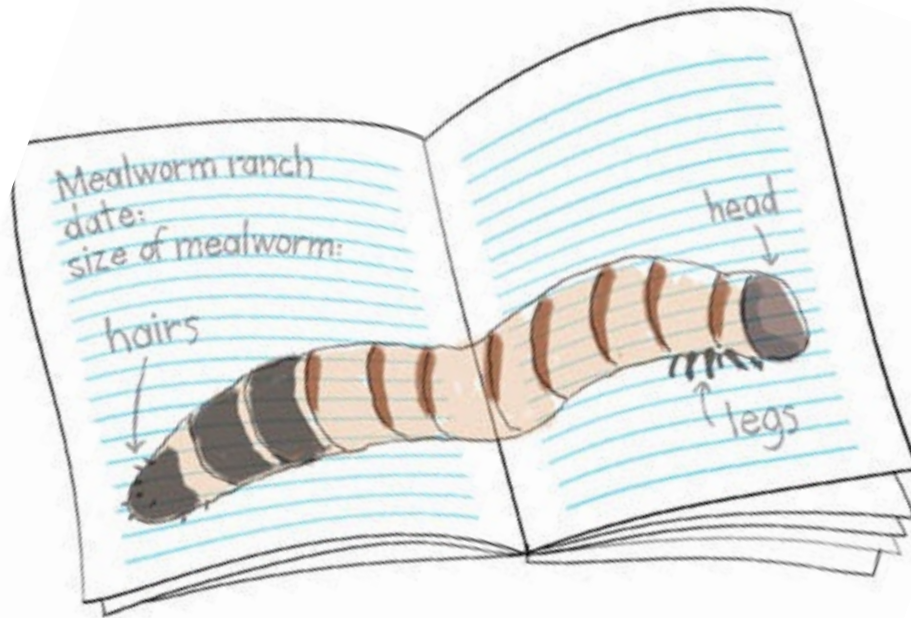
**Here's what you'll need to get started:**

1. A container about the size of a shoe box
2. Oatmeal. That's right oatmeal.
3. One or two carrots.
4. A dozen or so mealworms, which can be purchased inexpensively at any pet store.
5. A notebook so you can record your observations as the mealworms go through metamorphosis.

Note: mealworms are clean and harmless, so it's OK to pick them up gently with your fingers.

## Making a habitat for your experiment:

1. Punch a few holes in the top of the container for air.
2. Dump the oatmeal in the container so the caterpillars have something to eat.
3. Place the carrots in the container so the mealies will have some water. Carrots are full of water, so replace them if they dry out.
4. Place the mealworms in the container. Remove any that are dark brown or black.
5. Put the lid on the box. Mealworms are good climbers, so you should keep the lid on unless you are actually watching them.



Now you are ready make some notes in your notebook. You might want to draw what these guys look like the first day. You might even write some notes about what you see. For example,

What color are the mealworms?  
How long are they?  
How many legs do they have?  
Do they all seem to have the same number of segments?  
What happens when the mealworms are put on top of the oatmeal?  
How are they moving?  
Do they get along with each other?

Do they make noise?  
Where do they prefer to live?

You can think of more questions and write them down to see if you can find the answers.

Keep checking each day to see if anything has changed. Can you tell what they are eating? Are they growing? Write down any changes you find.

Keep watching. Write and draw in your notebook often. You are going to be surprised when you see the results.