

Mystery Worms

A teacher collected some beetles from a rotting log and placed them in a container of dry oatmeal in her classroom. She kept the box covered with a light cloth so that the beetles could not escape. She also asked one of her students to add potato and apple pieces once a week to provide food and moisture for the beetles. After several weeks, the student reported that there were some strange-looking, wormlike organisms in the container.

1. Formulate a hypothesis that might explain the presence of the “worms” in the container.
2. How could you test your hypothesis?
3. Identify the variables in your proposed experiment. Identify the control in your proposed experiment.
4. What data would you collect during your experiment?

1. Students may say that the “worms” are immature beetles, or that there might have been worm eggs or worms in the oatmeal.
2. If students thought that the worms were immature beetles, they may suggest isolating some of the worms to see if they develop into beetles. If students thought that there were eggs in the oatmeal, they may suggest taking a fresh sample of the oatmeal to see if worms hatch in it.
3. Student answers should indicate that the control remains unchanged and is a standard of comparison. Variables are the factors that are subject to change.
4. Students could count the number of worms in each container each day or each week.