



OBSERVING EARTHWORMS AND THEIR RESPONSE TO LIGHT



Question: How do earthworms respond to light?

Hypothesis: _____



MATERIALS

- 4–6 earthworms
- Clear plastic container with a lid (shoe box size works well)
- Dark paper or cardboard
- Tape
- Moist paper towels or soil
- Flashlight or desk lamp
- Timer or watch
- Observation sheet (this page)
- Pencil



SAFETY & CARE

- Handle earthworms gently and keep them moist.
- Do not use salt, chemicals, or anything harmful.
- Return the earthworms to soil outside when you are finished.
- Wash your hands after the experiment.



OBSERVATIONS

Describe what you saw.



CONCLUSION

What happened during the experiment? _____

What does this tell you about how earthworms respond to light? _____



PROCEDURE

1. Line the bottom of the container with moist paper towels or a thin layer of moist soil.
2. Place the earthworms in the container and let them settle in the dark for 5–10 minutes.
3. Divide the container into two equal sections using dark paper or cardboard to create a dark side and a light side. Tape it in place so earthworms cannot go over or under it.
Tip: Make sure there are no gaps under the divider.
4. Shine the flashlight or lamp onto one side of the container (the light side). The other side should remain dark.
5. Observe the earthworms for 10 minutes.
6. Record how many earthworms are on the light side and how many are on the dark side at 1-minute intervals.
7. After 10 minutes, remove the divider and observe where the earthworms go.



DATA TABLE

Time (minutes)	Number of Earthworms on Light Side	Number of Earthworms on Dark Side
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		