



SCIENCE EXPERIMENT

Testing whether eggshell color affects heat absorption

Name: _____ Date: _____



QUESTION

Does eggshell color affect how much heat an egg absorbs when exposed to the sun?



HYPOTHESIS

If eggshell color affects heat absorption, then _____

because _____



MATERIALS

- 3 eggs (different colors: white, brown, and any other color you can find)
- 3 small cups or egg holders
- 3 thermometers (digital recommended)
- Black construction paper or tray
- Sunny location
- Timer or clock
- Notebook and pencil



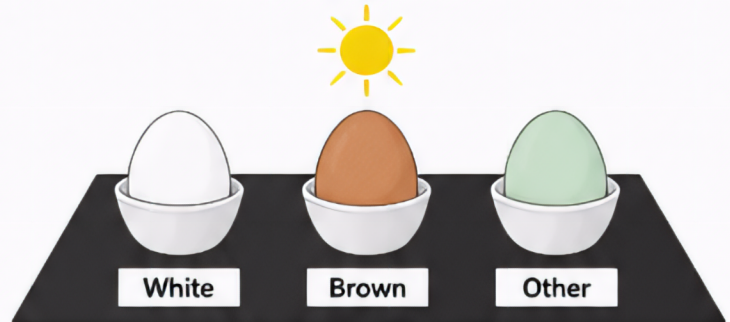
PROCEDURE

1. Place the black paper or tray in a sunny location.
2. Put each egg in a cup or egg holder.
3. Label the eggs: White, Brown, and Other.
4. Use a thermometer to measure the temperature of each egg at the start. Record in the data table (Time = 0 minutes).
5. Place the eggs on the black surface in direct sunlight.
6. Measure and record the temperature of each egg every 5 minutes for 30 minutes.
7. Do not move the eggs during the experiment.
8. After 30 minutes, make sure to handle eggs carefully.

CONTROLLED VARIABLES (Keep these the same)

- ✓ Same size eggs (as close as possible)
- ✓ Same starting time
- ✓ Same location and sunlight
- ✓ Same surface (black paper or tray)
- ✓ Same measurement intervals

EXPERIMENT SETUP



Place in direct sunlight.

DATA TABLE

Time (minutes)	Temperature (°F or °C)		
	White Egg	Brown Egg	Other Egg
0			
5			
10			
15			
20			
25			
30			

(Record temperatures at each time interval.)



ANALYSIS QUESTIONS

1. Which egg reached the highest temperature?

2. Which egg had the lowest temperature?

3. How big was the temperature difference between the highest and lowest egg at 30 minutes?

4. What does your data suggest about the effect of eggshell color on heat absorption?



CONCLUSION

Based on your results, does eggshell color affect heat absorption? (Circle one) **Yes** **No**
Explain your answer.

