HOMESCHOOL SCIENCE EXPERIMENT

TESTING THE EFFECT OF EXERCISE ON HEART RATE

Name: _____

Date: _____

Experiment # _____

QUESTION

How does exercise affect heart rate?

HYPOTHESIS

If I exercise, then my heart rate will _____

because _____.

MATERIALS

- Stopwacth or timer
- Heart rate measuring method (see ideas below)
- Pen or pencil
- Data table (below)

Ways to measure heart rate:

- Pulse at the wrist (radial pulse)
- Pulse at the neck (carotid pulse)
- Heart rate monitor/watch (if available)

Count beats for 60 seconds for the most accurate result.

PROCEDURE

1. Rest quietly for 5 minutes.
2. Measure your resting heart rate. Count your pulse for 60 seconds and record it in the table.
3. Perform exercise for 3 minutes. Choose an activity such as jumping jacks, running in place, or fast-paced dancing.
4. Immediately after stopping, measure your heart rate. Count for 60 seconds and record it.
5. Continue measuring your heart rate at 1 minute, 2 minutes, and 3 minutes after exercise.
6. Record all results in the data table.

DATA TABLE

Time	Heart Rate (beats per minute)
Resting (after 5 min rest)	
Immediately after exercise (0 min)	
1 minute after exercise	
2 minutes after exercise	
3 minutes after exercise	

ANALYSIS

1. What was your resting heart rate? _____
2. What was your highest heart rate? _____
3. How did your heart rate change after exercise? _____
   _____
4. How many minutes did it take for your heart rate to return close to your resting rate? _____

CONCLUSION

1. Was your hypothesis correct? Why or why not? _____
   _____
2. What did you learn from this experiment? _____
   _____

TIP: Stay hydrated, wear comfortable clothes, and stop if you feel dizzy or unwell.