



SCIENCE EXPERIMENT

Testing the Effect of Different Exercises on Breathing Rate



Name: _____

Date: _____

QUESTION

How does doing different exercises affect breathing rate?

HYPOTHESIS

If I do _____ (type of exercise),
then my breathing rate will _____
because _____.

PROCEDURE

1. Sit quietly in a chair for 5 minutes. This is your resting period.
2. **Measure your breathing rate for 1 minute while sitting quietly.** Count how many times you breathe in (one inhale) in 1 minute. Record the number in the table.
3. Do the first exercise for 2 minutes at a steady pace.
4. Immediately after stopping, measure your breathing rate for **1 minute**. Record the number in the table.
5. Rest and sit quietly for 3–5 minutes until your breathing feels normal again.
6. Repeat steps 3–5 for each of the other exercises.
7. Compare your results.

MATERIALS

- Stopwatch or timer
- Chair
- Space to exercise
- Data table (on this sheet)
- Pencil



SAFETY FIRST

- Make sure you have enough space to exercise safely.
- Wear comfortable clothes and supportive shoes.
- Stop if you feel dizzy, lightheaded, or unwell.
- Drink water before and after the experiment.

EXERCISES TO TEST

Test at least 3 different exercises.

Examples (you may choose these or your own):

1. _____
2. _____
3. _____
4. _____

DATA TABLE

Condition	What I Did	Time of Exercise	Breathing Rate (breaths per minute)		Change in Breathing Rate (After – Resting)
			Resting (1 min)	After Exercise (1 min)	
1. Resting	Sitting quietly	5 minutes rest	_____	N/A	N/A
2.	_____	2 minutes	_____	_____	_____
3.	_____	2 minutes	_____	_____	_____
4.	_____	2 minutes	_____	_____	_____

ANALYSIS

1. Which exercise caused the biggest increase in breathing rate?

2. Which exercise caused the smallest increase in breathing rate?

3. What do you notice about how exercise intensity affects breathing rate?

CONCLUSION

What did you find out from your experiment?

Was your hypothesis supported? Why or why not?



TIP: A breath = one inhale. Try to pace exercises steadily and use the same timing for each test.