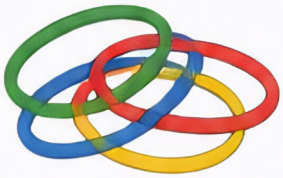

TESTING THE ELASTICITY — of — DIFFERENT RUBBER BAND BRANDS

Name: _____ **Date:** _____ **Experiment #:** _____

OBJECTIVE

To compare the elasticity of different rubber band brands by measuring how much each band stretches under the same load.

QUESTION

Which rubber band brand stretches the most under the same load, and which stretches the least?

MATERIALS

- 3 different brands of rubber bands (same size and width if possible)
- Meter stick or ruler (mm)
- 100 g mass (or a set mass you can hang)
- Stand or doorknob to hang rubber bands
- Tape
- Data sheet (this page)
- Pen or pencil

PROCEDURE

1. Label your rubber bands Brand A, Brand B, and Brand C.
2. Measure the original length of each rubber band hanging freely. Record in the table.
3. Hang the first rubber band from the stand or doorknob.
4. Attach the 100 g mass to the rubber band.
5. Wait 10 seconds, then measure the new length of the rubber band. Record in the table.
6. Calculate the stretch (mm) by subtracting the original length from the new length.
7. Repeat steps 3–6 for the other two rubber band brands.
8. (Optional) Repeat the test 2 more times for each brand and calculate the average stretch.

DATA TABLE

Load Used: _____ g

Rubber Band Brand		Original Length (mm)	New Length with Load (mm)	Stretch (mm)
Brand A	Trial 1			
	Trial 2			
	Trial 3			
	Average			
Brand B	Trial 1			
	Trial 2			
	Trial 3			
	Average			
Brand C	Trial 1			
	Trial 2			
	Trial 3			
	Average			

ANALYSIS QUESTIONS

1. Which rubber band brand stretched the most on average? _____
2. Which rubber band brand stretched the least on average? _____
3. What might cause the differences in how much the rubber bands stretched? _____

_____

4. Which rubber band brand do you think would be best for slingshots or catapults? Why? _____

_____

_____

CONCLUSION

Write 2–3 sentences summarizing what you learned from this experiment.

_____

_____

_____

_____

TIP: For the most accurate results, use rubber bands that are the same size and width, and always use the same mass.