

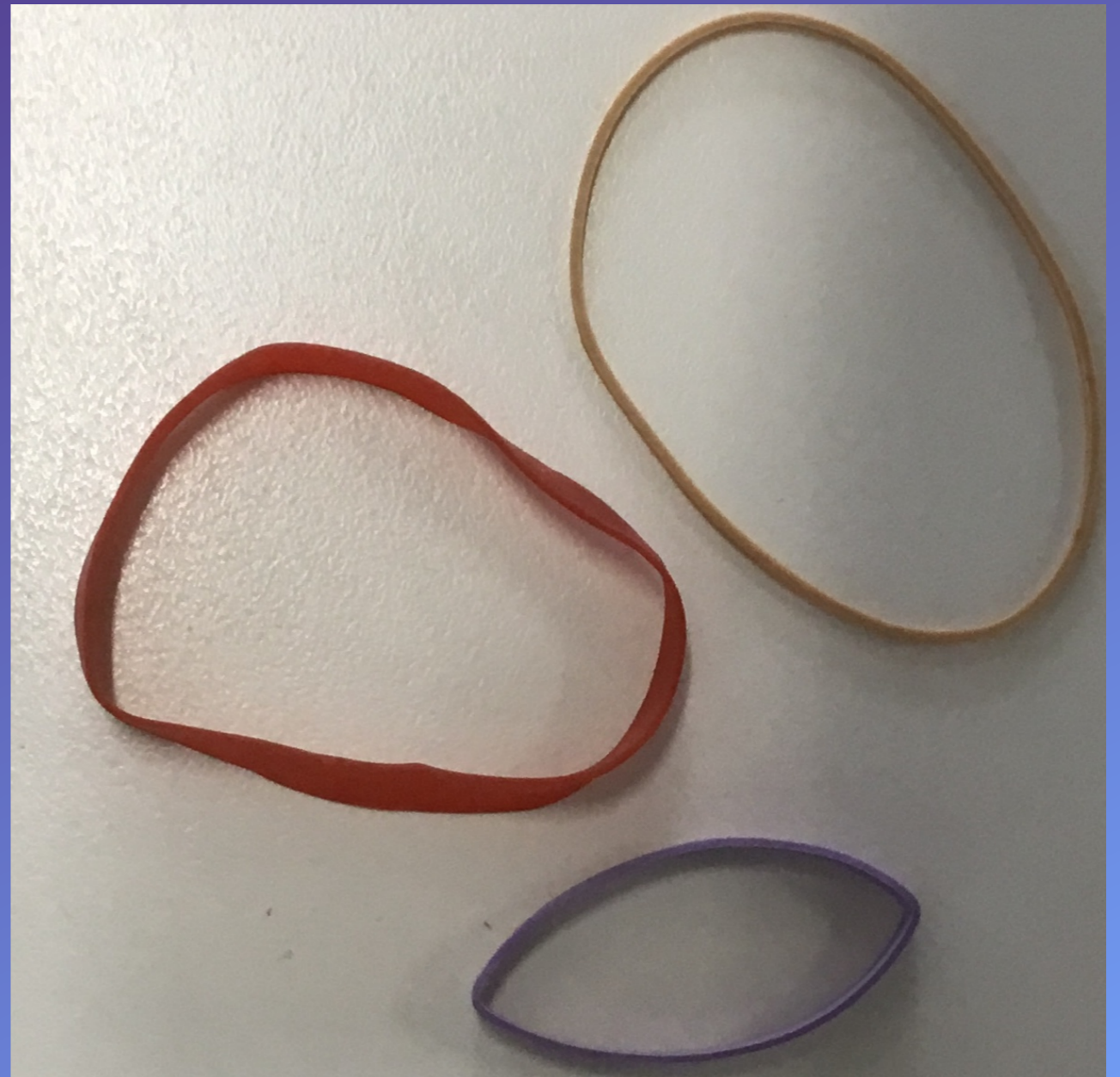
ELASTICITY



By Henry, Jack and Olive

WHICH RUBBER BAND WILL HOLD THE MOST WEIGHT?

For our experiment, we decided to test the elasticity of different rubber bands.





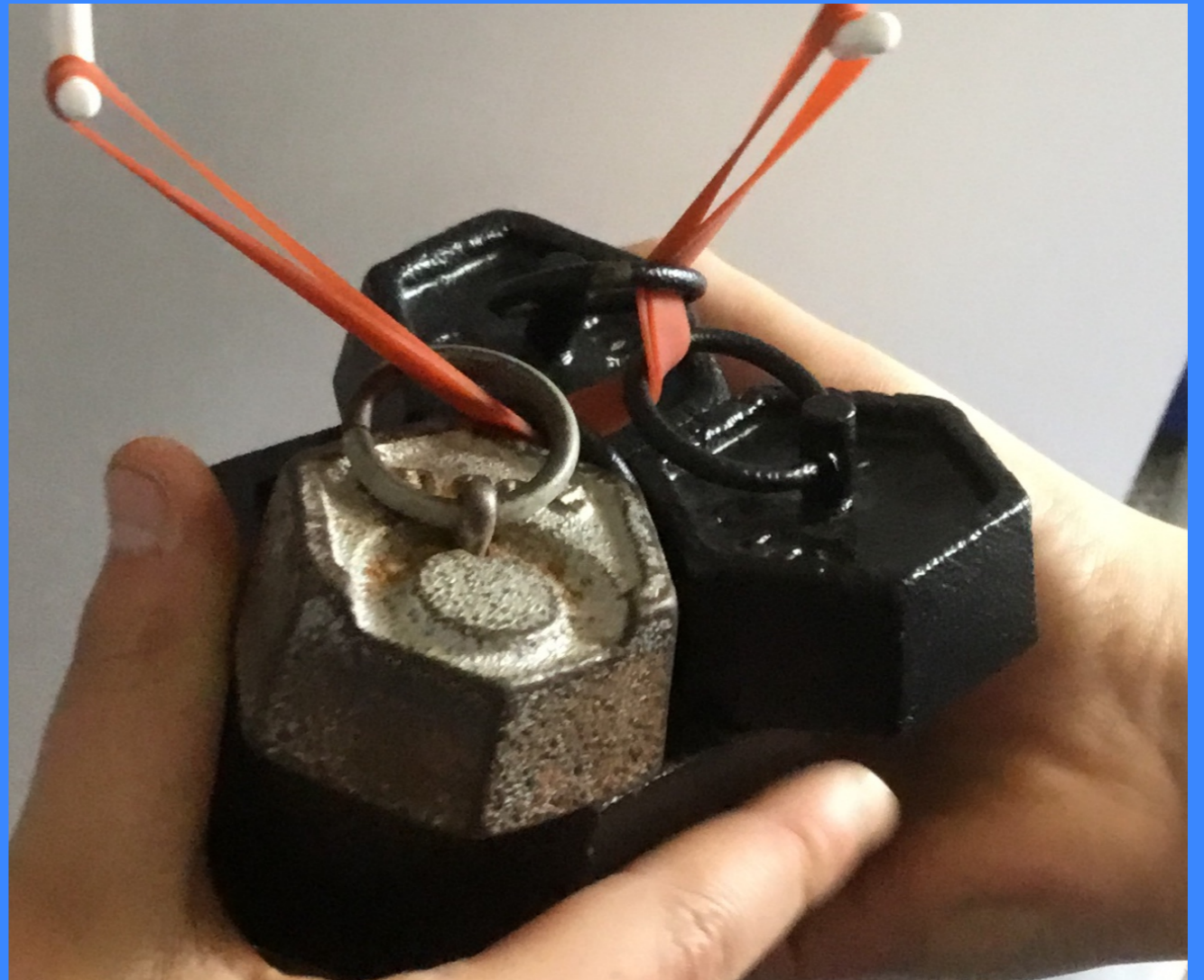
VARIABLES

Change:

Rubber band thickness.

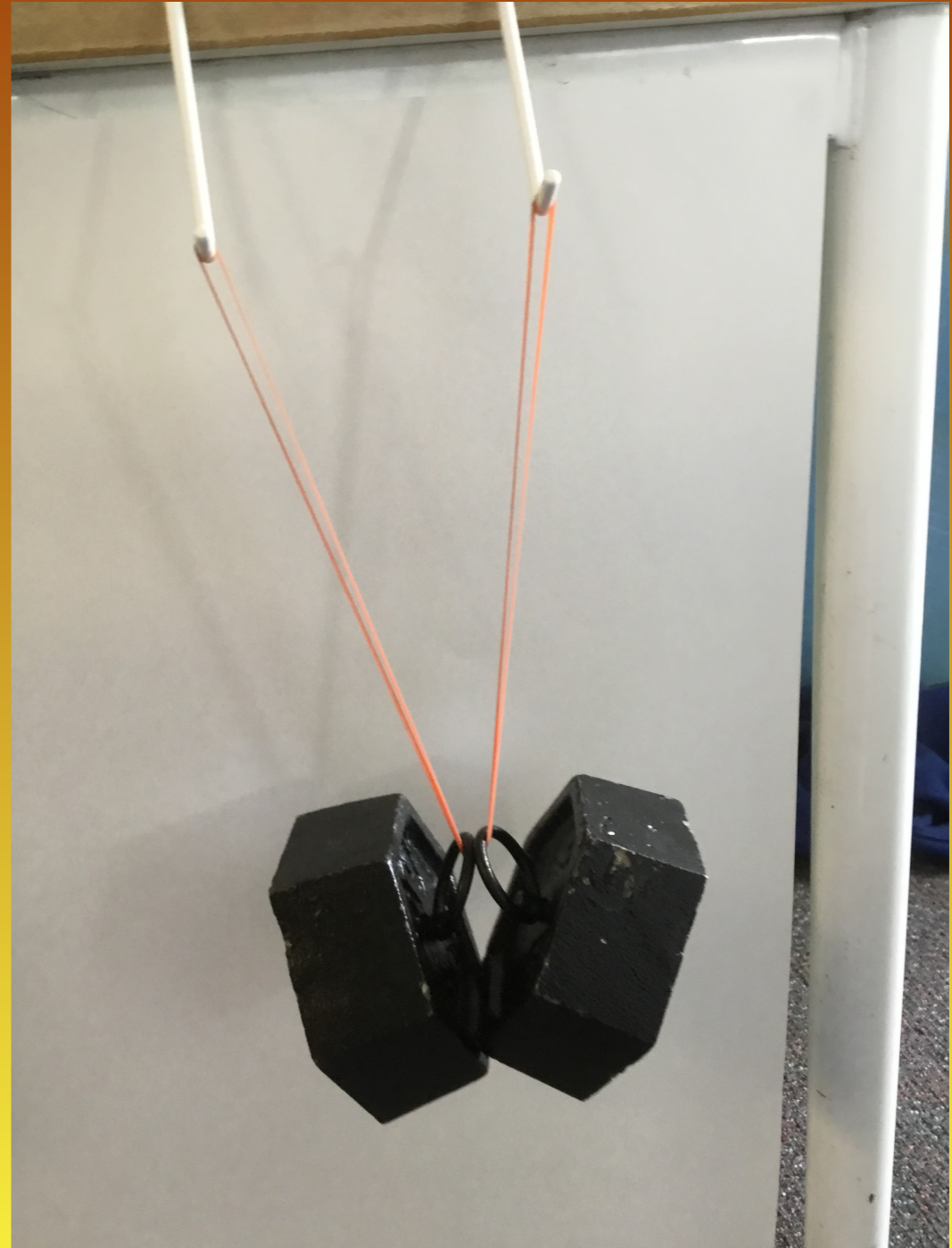
Keep the Same:

The weights.



MEASURE

We will measure the weight that the rubber bands can hold and how much the rubber bands stretch.



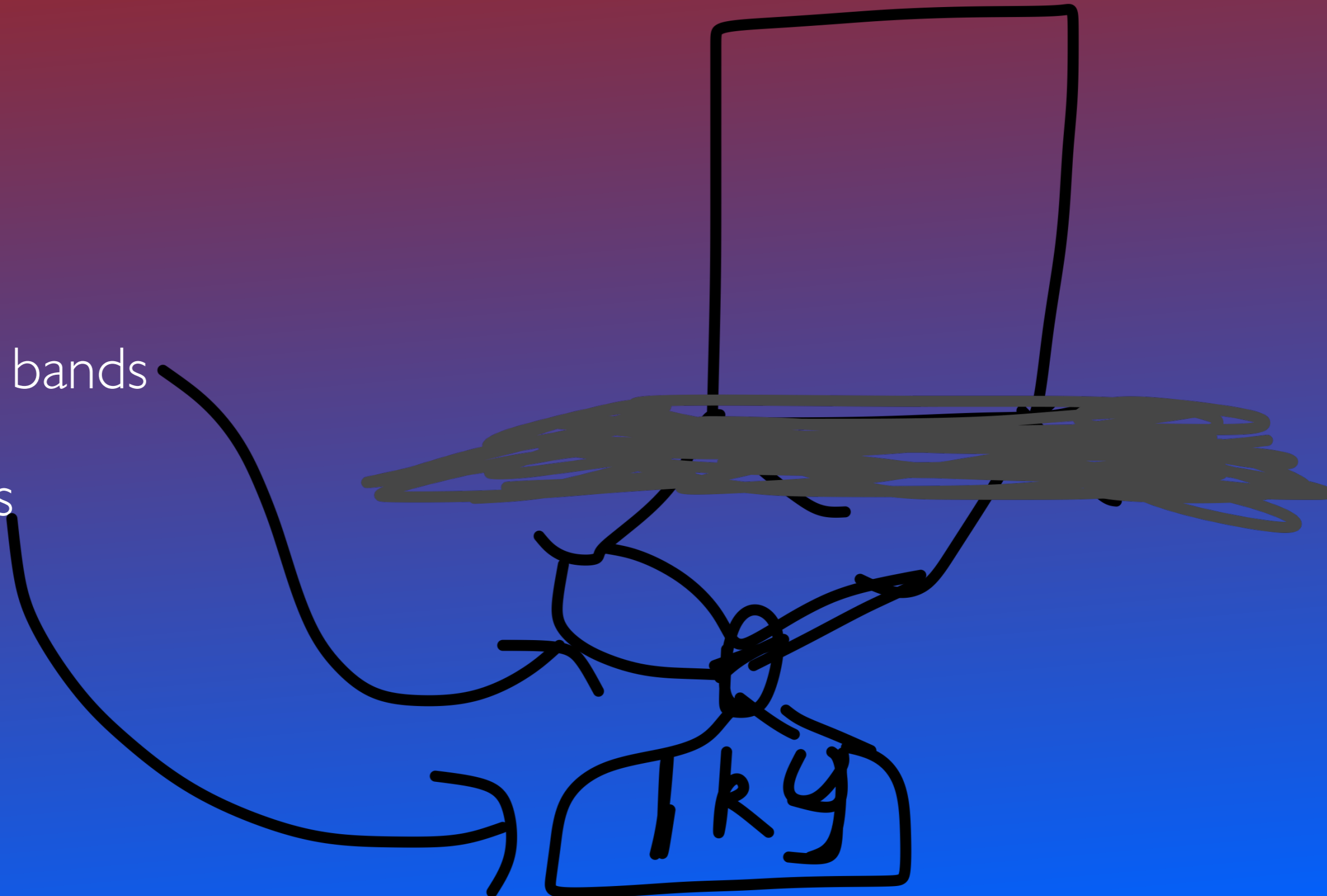
HYPOTHESIS

We hypothesise that the thickest rubber band will hold the most weight.



MATERIALS

- Rubber bands
- Weights



METHOD

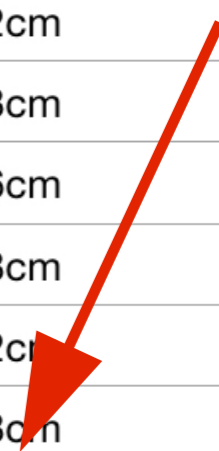
1. Duct tape the stand to the table.
2. Thread the rubber band through the weight hook
3. Attach rubber band to the hooks
4. Measure one side and double the amount
5. Take photo
6. Repeat (but add new weight)

RESULTS

Thick		Medium		Thin	
Diameter: 8.5 cm	Width: 0.7	Diameter:1 cm	Width:0.5	Diameter:9.5	Width:0.1
Weight	Stretch	Weight	Stretch	Weight	Stretch
100g	9cm	100g	12cm	100g	12cm
200g	11cm	200g	13cm	200g	14cm
300g	12cm	300g	14cm	300g	18cm
400g	14cm	40g	15cm	400g	22cm
500g	14cm	500g	16cm	500g	27cm
600g	15cm	600g	18cm	600g	31cm
700g	18cm	700g	18cm	700g	35cm
800g	19cm	800g	21cm	800g	38cm
900g	19cm	900g	21cm	900g	39cm
1kg	21cm	1kg	23cm	1kg	42cm
1kg 200g	25cm	1kg 200g	27cm	1kg 200g	48cm
1kg 400g	28cm	1kg 400g	28cm	1kg 400g	46cm
1kg 600g	28cm	1kg 600g	31cm	1kg 600g	48cm
1kg 800g	36cm	1kg 800g	35cm	1kg 800g	52cm
2 kg	36cm	2 kg	35cm	2 kg	58cm
2 kg 500g	38cm	2 kg 500g	39cm	2 kg 500g	SNAP
3kg	43cm	3kg	43cm	3kg	SNAP

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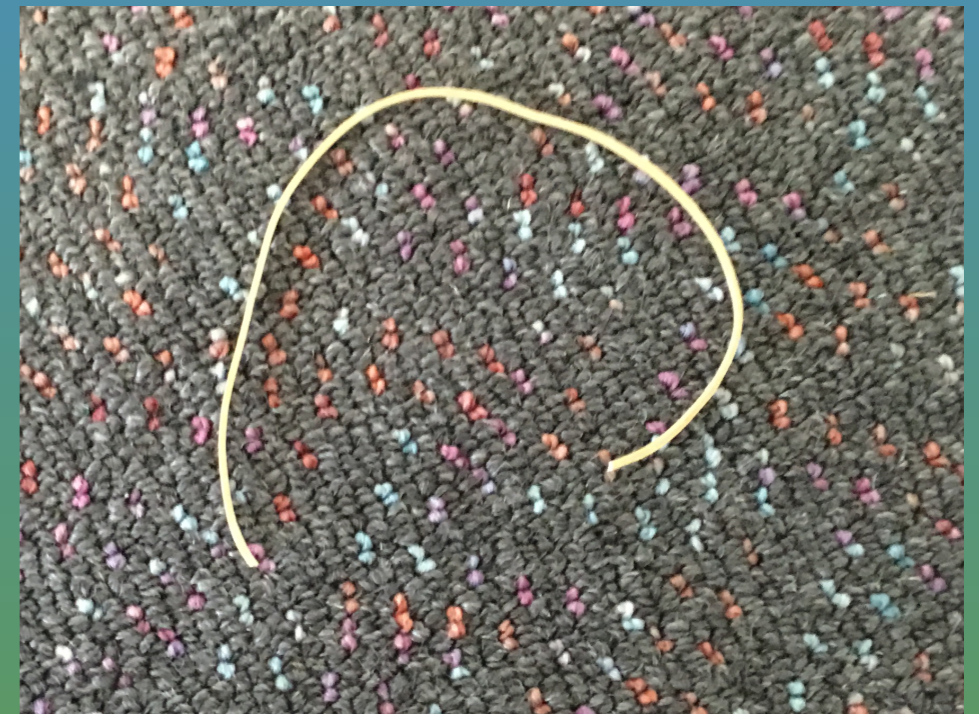


CONCLUSION

Our hypothesis was that the thickest rubber band would be the strongest and we were correct. It stretched 34.5cm more than its original size when holding the weights. The medium thickness rubber band didn't snap either. It stretched 31 cm.

Next time we would like to be more organised, we would like to bring our materials on time.

We showed the positive learner attributes of collaboration, knowledge, connectedness, resilience and curiosity. We showed collaboration when we worked together to help each other lift the weights.





THANKS FOR LISTENING