

WALT: identify the suitability of different materials.

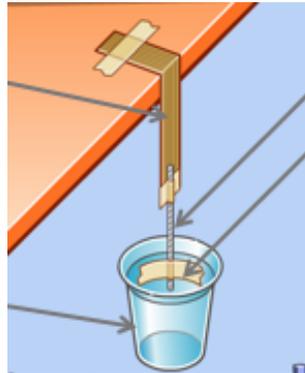
Week 8 - Monday 1st March 2021

In a castle here would have been materials used for lots of jobs. One part of the castle would have needed a catapult. The catapult was used to keep enemies from entering the castle. The catapult would have needed to be strong and hold the rocks and stones still before the knights and soldiers fired it.



Today you are going to test the strength of different materials to see what would have been the best to hold the catapult before it was released.

THINK AND TALK: Think about all the materials you have been experimenting with and what has been strong so far.



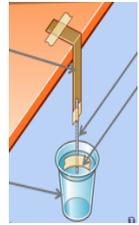
You are going to complete your own experiment today to see which material would be best for the catapult.

You are going to see how strong different materials are to hold a cup to a table without it breaking or stretching to let the cup move towards the floor.

There are different parts to an experiment.

EQUIPMENT - METHOD - PREDICT - TEST - RESULT - CONCLUSION

Remember it has to be a **FAIR TEST** which means for this experiment you need to use the same length of material to hold the cup from the table.



Task 1: EQUIPMENT: Find 3 different types of materials in your house. You could use: tin foil, cardboard, paper, cling film OR something different that you have. You can find more if you want to challenge yourself.

Task 2: PREDICTION: Make a small table to show the materials you have chosen and make a prediction about whether it will be strong enough to hold the cup.

Material	Prediction	Will it hold my objects in the cup?	Does it hold the cup in the same place?
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Task 3: METHOD, TEST, RESULTS: Attach the length of material to the cup and attach it to the edge of the table. Place objects into the cup (pasta, lego bricks, small toys). See if the material holds its shape, rips or stretches.

Record in the table what happened with each material as you attach it to the cup and table.

An example is shown below.

Material	Prediction	Will it hold my objects in the cup?	Does it hold the cup in the same place?
Tin Foil	The cup will fall.	No	No - it rips

TASK 4: CONCLUSION: Look back at your results and think about what you have found out about the strength of the materials which you have tested.

Write what you have found out. Use this sentence starter to help. You can talk to an adult about what you have found out.

In conclusion I have found out that _____ is the strongest material to hold the catapult because _____.