Testing the strength of paper packaging

**Year 4**

## Test 1 investigation question: Which packaging material has the highest tensile strength?

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| --- | --- | --- | --- |
| Material | Prediction | Reason for prediction | Observe (Result) |
| e.g. Tissue paper | Tear | Because it is thin. | It tore easily. |
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## Test 2 investigation question: Does the tensile strength of each packaging material change when it is wet?

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| --- | --- | --- | --- | --- |
| Material | Prediction | Reason for prediction | Result when dry | Result when wet |
| e.g. Tissue paper | Tear | Because it is thin and made of fine fibres.  | Low tensile strength (tore easily) |  |
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|  |  |  |  |  |

## Conclusions: When you share your results, your team should share their ideas about the following:

* Which material did your team find was the strongest?
* Why did you make that decision?
* Do you think that will match what other teams found?
* Which material might be best for chip packaging (only based on its strength)?
* What other properties might be important to test?