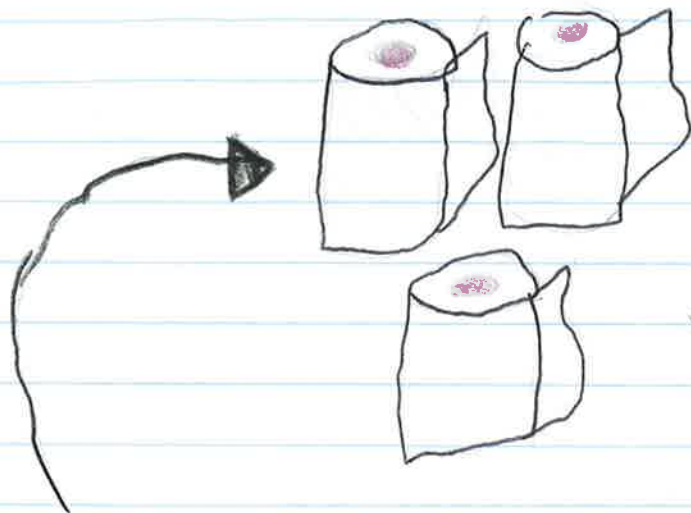


YOUNG SCIENTIST

QUESTION.

- To find out about paper towel.



ANSWER.

- soaking - fastest
- amount.

- Which can be re-used.

- Strongest.

LIQUID.



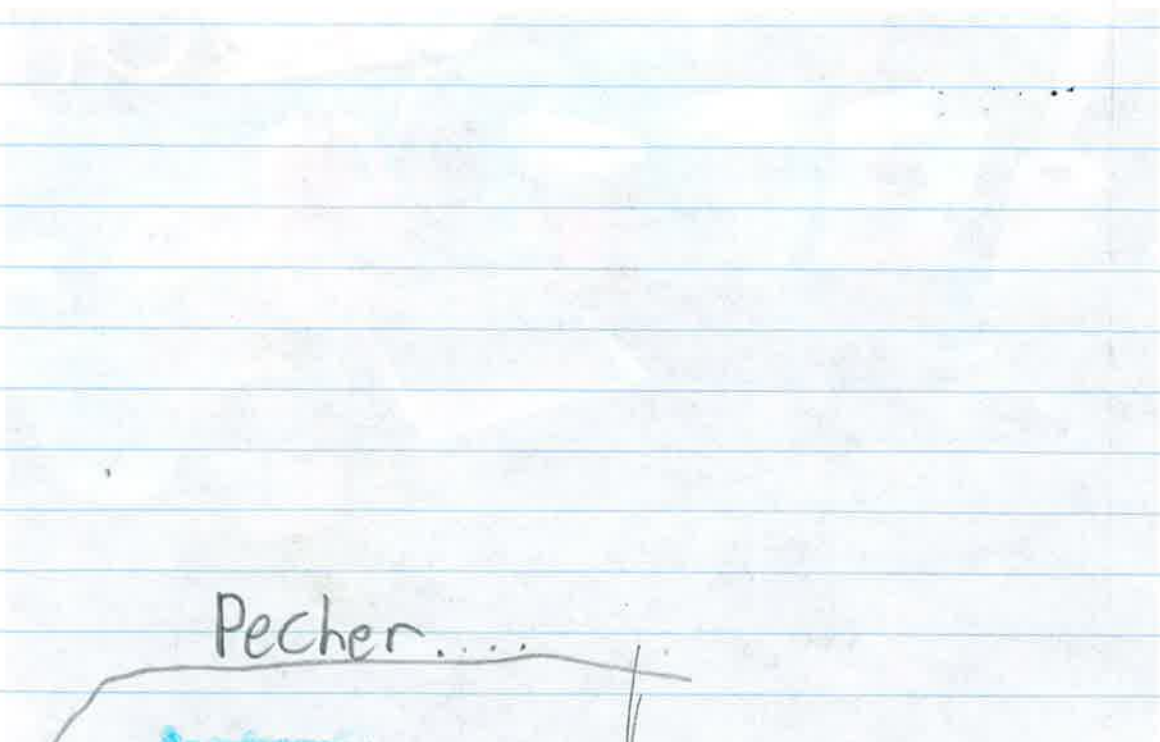
- Orange Juice.
- Water. ✓
- oil.
- soft drink ✓

x3

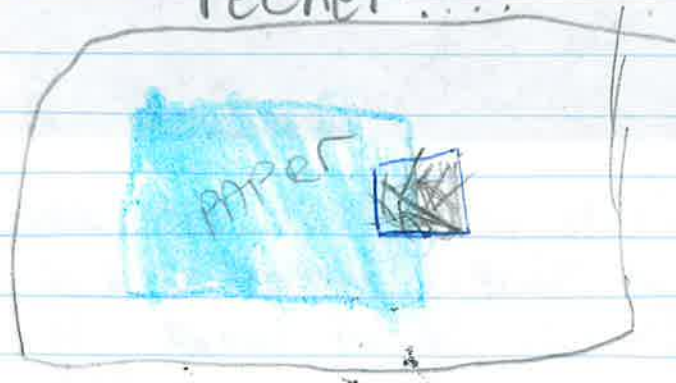
to get clearer results.

Hypothesis

I estimate that the thickest paper towel will absorb the quickest. I estimate that the most thinnest paper towel will absorb the least amount of water.



Pecher....



Experiment / Investigation

materials

- Paper towels
- various liquids
- container
- measuring

We are going to use the same amount of each liquid and the same soaking time. We are doing this so the experiment gives controlled results.



We are testing 4 different types of papertowel in 4 different liquids to find out which type of paper towel absorbs the most of each different liquid.

We are also going to do the experiment three times to get a more accurate range of results.

Paper towel

1. Handee Ultra (2 ply)
2. Emporia max imqa (4 ply)
3. Homebrand papertowel (1 ply)
4. Non-pattern papertowel (Smooth)

Liquids

1. Vegetable oil
2. Orange Juice
3. Coca-Cola zero
4. Water (Cold)

Soaking time - 1 minute in 300ml of liquid
dripping time - 3 seconds



Adjustment to experiment

We started the experiment with a measuring jug to record results, but we found this to be too inaccurate. So we decided to use some digital food scale. So 300ml of liquid = 300 grams mass.

$$\begin{array}{l} 300 \text{ ml} = 300 \text{ grams} \\ (\text{liquid}) \quad \quad \quad (\text{mass}) \end{array}$$

So we put 300ml (300 grams) of each liquid in the container and soaked one piece of each different paper towel for 1 minute as we removed the piece of paper towel we let it drip for 3 seconds every time

Data recording!

Paper towels

LIQUID	1	2	3	4
Water				
1 st	28 g	35 g	25 g	15 g
2 nd	31 g	31 g	25 g	19 g
3 rd	30 g	35 g	21 g	16 g
Oil				
1 st	52 g	50 g	25 g	45 g
2 nd	49 g	52 g	27 g	39 g
3 rd	50 g	46 g	23 g	41 g
Orange Juice				
1 st	50 g	50 g	20 g	15 g
2 nd	47 g	52 g	22 g	17 g
3 rd	51 g	50 g	22 g	16 g
Coca-Cola				
1 st	25 g	35 g	10 g	5 g
2 nd	26 g	33 g	15 g	9 g
3 rd	23 g	37 g	11 g	5 g

Best Absorption!

- Water = 35 g (Emporia Maxima, 4 ply)
- Oil = 52 g (Handee Ultra & Emporia)
- Orange Juice = 51 g (Emporia Maxima, 4 ply)
- Coca-Cola = 37 g (Emporia Maxima, 4 ply)

Findings / results

we found that the thickest paper towel Emporia maxima absorbed the largest amount of liquid in all cases. It soaked up the most of each liquid. The Handee Ultra was equal to the Emporia when soaked in the vegetable oil only. This was what we predicted at the beginning.