

Materials that absorb liquid

Imagine you work for a cleaning team in a messy kitchen which has lots of spills. The team wants to design a new product that can be used quickly to wipe up all the liquid and spills. It will need to be absorbent and reusable. Investigate which material would be most useful for our new product.

You will need:

- Different materials e.g. paper, towel, cotton, fabric
- Water
- Pipette or syringe
- Beakers (clear cups or pots)
- Elastic bands (optional)



Instructions:

1. Predict which materials you think will absorb the most and the least amount of liquid.
2. Carefully examine the different pieces of materials, consider what they feel and look like. What properties does the material have?
3. Place a material on top of the beaker, you might want to use an elastic band to secure this.
4. Using the syringe, pour droplets of water onto the material until you can see it leaking through. Record how many droplets the material absorbed.
5. Observe and record how the material feels and looks after.
6. Repeat steps 3 to 5 for all the materials.
7. Record your results.

Predictions:

I predict the _____ will absorb the most amount of water.

I predict the _____ will absorb the least amount of water.

My observations:

Material	Description when dry	Is it absorbent?	How many droplets did it absorb?	Description when wet.

Conclusion:

From the results of this experiment, which material would you recommend as the best material for the new product? Why?

Questions to think about:

How much water has been absorbed? Has the water soaked the material or stayed on the surface?

Has the material changed shape, colour or size?

Does it feel heavier than it did before the water was poured on it?