



Practical investigation - Wipes out of pipes

Test the difference between toilet paper and wipes and the other stuff we put down the toilet.

Need some lesson ideas? Our [High school](#) webpage has syllabus linked lesson plans to support this experiment.

What happens when you flush the toilet?

Have you ever wondered where the water goes when you flush the toilet? All the water you've used inside your house from the toilet, sinks, bath, shower and laundry, go down drains. This water is called wastewater, its 99% water. The remaining one per cent is made up of things you've added as you've used it.

The wastewater leaves your home, goes underground into larger pipes. It flows and is pumped to one of our wastewater treatment or water recycling plants. There wastewater is treated to be reused as recycled water or discharged safely into the environment.

Find out more

Learn about how we treat wastewater to protect public health and the environment.

See our [Wastewater treatment](#) and [Protecting the environment](#) webpages for more information.

But sometimes things don't make it to our wastewater treatment plants. Sometimes pipes get blocked and wastewater might even spill out. There's one thing that's involved in 75% of those blockages, wipes! Why are wipes causing blocked pipes? Let's explore with this simple experiment.

What you'll need

Safety first! Adult supervision required. Follow all safety instructions as directed on product packaging.

- 5 clear glass or plastic jars with lids
- Tap water
- 1 wet wipe
- 1 facial wipe
- 1 facial tissue paper
- 2 toilet paper sheets
- masking tape
- marker
- stopwatch
- other common items that get flushed – cotton bud, floss, coins use your imagination!



Example of materials for your experiment

Activity

1. Record a hypothesis in your results table. Which items do you think will break down?
2. Label your jars - 'tissue paper', 'wet wipes', 'facial wipe', 'toilet paper', and 'common things'.
3. Fill the jars up with tap water, three-quarters full.
4. Place items in the jars. Close the lids.
5. Shake for 30 seconds.
6. Record your observations. Compare the items in each jar.
7. Repeat steps 5-6 again. Did they break down after a minute?
8. Continue to try and break them down (optional). How long will it take?

Did you know? We have a [Wipes out of pipes experiment video](#) to help your investigation.



Step 2



Step 4



Step 4



Step 5

Results

Describe your observations like a scientist.

- Can you describe what's happening - how big are the pieces?
- What's happened with the water? Is it cloudy or clear?
- Do you have more notes or want to make a scientific illustration?

| Time (sec) | Hypothesis and observations | | | | |
|-------------------|-----------------------------|----------|-------------|--------------|---------------|
| | Tissue paper | Wet wipe | Facial wipe | Toilet paper | Common things |
| 0 (hypothesis) | | | | | |
| 30 | | | | | |
| 60 | | | | | |
| Optional notes | | | | | |

Discussion

- What happened to the different items in the water?
- Was your experiment a fair test? Why or why not?
- What other things can you try? Put multiple things in a jar? Change how you shake the jar? Use hot water?

Want to know more?

Come behind the scenes with your school on a free excursion. See our [Excursion requests](#) webpage for more information. Proud of your results? We'd love to hear from you. Share with us using #sydneywatereducation.



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