

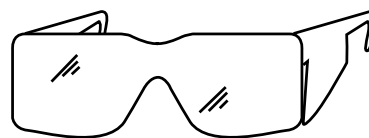
Cloudy water can harm animals and plants in water. It can raise water temperature, block sunlight and suffocate small animals and plants.

Scientists use the word 'turbidity' to measure cloudiness. They use the NTU scale (on a turbidity tube) as units of measurement.

Turbidity is caused by very small solid particles of clay, algae or small animals, spread or suspended in water.

You will need

- safety glasses
- turbidity tube
- 250 mL beaker
- samples of cloudy water
- cold tea



Safety

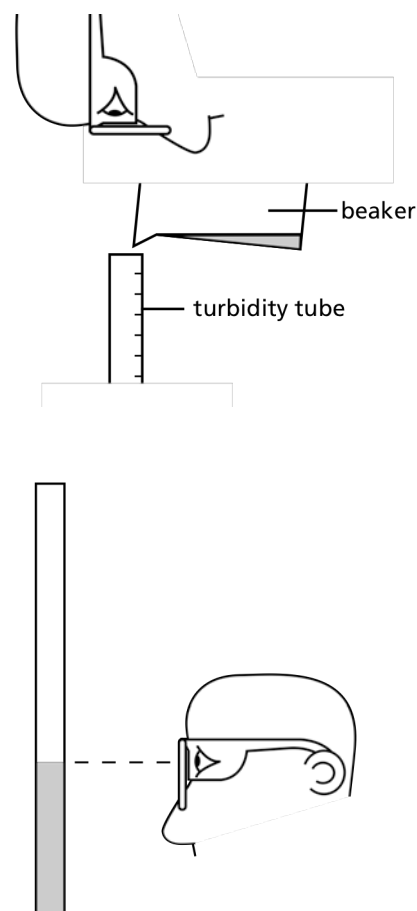
Wear safety glasses when using liquids.

What to do

1. Work with a partner.
2. Put 250 mL of tap water in a beaker.
3. Put the two parts of turbidity tube together.
4. Person A holds the tube vertical (straight up) and looks at the pattern on the bottom.
5. Person B slowly pours the tap water sample into the tube.
6. Person A says 'Stop' when they can't see the pattern any more.
7. Person B stops, reads the measurement on the NTU scale, and writes it in the results table.
8. Repeat these steps and measure the turbidity of different samples. (You may need to shake the samples.)

Tech tip

Make sure your eye is level with the water level in the turbidity tube.



Results table

Fill in all columns of this table.

WATER SAMPLE	NTU MEASUREMENT
tap water	

Questions:

1. What did you notice about turbidity measurements for tap water and cold tea?

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2. Why did you have to shake your cloudy water samples?

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