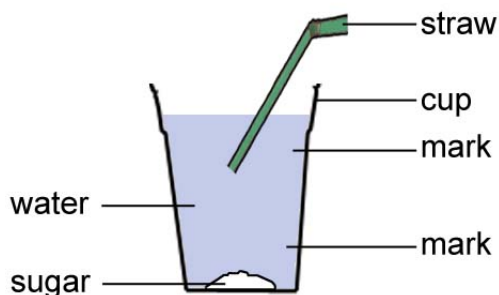


## Tasty particles

Name .....

### What each group needs:

- One glass or plastic drinking cup
- Drinking straws
- Tap water
- About 20 drops lemon juice – enough to taste in water
- One teaspoon of sugar
- One dropping pipette
- Eye protection.



### What you do

1. Taste the water
  - Fill the cup with water to 1 cm from the top.
  - Use the straw to taste the water in the three marked sections of the cup.
  - Write down how it tastes.
  - Refill the cup.
2. Add lemon juice
  - Add about 10 drops of lemon juice to the water.
  - Taste the water again at three levels.
  - Write down how it tastes.
  - Keep the water for the next step.
3. Add sugar
  - Add one teaspoon of sugar to the water.
  - Don't stir. Let the sugar settle.
  - Taste the water again at three levels.
  - Write down how it tastes.
  - Keep for the next step.
4. Wait and taste again
  - Wait for 2 minutes.
  - Taste the water, after waiting, at the three levels.
  - Write down how it tastes.
  - If you can, wait even longer and taste again.

Note: This resource can be downloaded as part of a collection of activities exploring atoms and nanochemistry (<https://rsc.li/37302Bh>) or for use with a lesson plan on matter, elements and atoms for 11–14 year olds (<https://rsc.li/32yJ6Qu>).

## Results

Level	Water alone	Water and lemon juice	Water, lemon juice and sugar	Water, lemon juice and sugar after waiting
Top				
Middle				
Bottom				

## Questions

1. Use the test results to explain if water, lemon juice and sugar particles are all the same.
2. What do these results tell you about how particles can behave?
3. What have you learned about particles (and atoms) in this lesson?