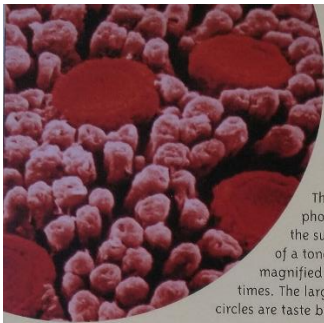


Test your taste buds!

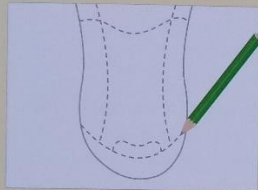


This is a photo of the surface of a tongue magnified many times. The larger red circles are taste buds.

Open wide

Have you ever noticed how you can't always taste your food when you have a cold? Discover the importance of smell and saliva here, and find out if you think you taste different things better with different parts of your tongue.

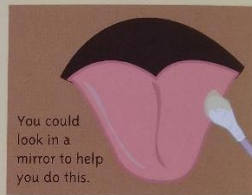
Tongue map



1. Draw a tongue on paper. Mark lines on it, like this, to divide up different areas of the tongue.

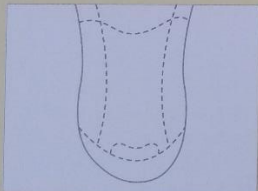


2. Take four cups. Put a different liquid in each one: lemon juice, cold black coffee, salty water and sugary water.

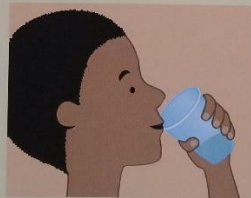


You could look in a mirror to help you do this.

3. Dip a cotton bud in the lemon juice and dab it on the areas of your tongue shown on the tongue map.



4. Does the lemon juice taste stronger in one part than another? Mark down the result on your tongue map.



5. Rinse your mouth with water. Repeat the test with the other liquids. Mark your results on the map.

What's going on?

Some scientists think that your tongue works with your brain to recognize certain tastes on different areas of your tongue. They believe you taste bitter things at the back, sweet things at the front, sour things at the sides and salty things on the tip. But other scientists believe you can taste all flavours all over your tongue. What do you think?



For a link to a website where you can try out more experiments to test your senses, go to www.usborne-quicklinks.com

Smelling power



Do this experiment with a friend.



2. Label what's in each cup. Then ask a friend to mix them up, so you don't know which is which.



Don't look in the cup!

3. Get your friend to pass you a drink at a time. Take a sip of each. Can you work out which is which?



4. Mix up the cups again. Now take sips from them while holding your nose. Can you still identify them?

What's going on?

Your nose is much more sensitive than your tongue. Without it, it's very difficult to identify tastes. You don't normally notice this because you smell and taste at the same time. Taking away your ability to smell shows how most of your sense of taste really comes from your sense of smell.

Find the magic ingredient



1. Put a small amount of different dry foods on a plate. Try salt, sugar, a piece of cracker and a crisp.



2. Stick your tongue out and dab it with a paper towel, until it's dry. Keep your tongue out.



3. Use a clean finger to dab a little salt on your dry tongue. Can you taste it? Rinse your mouth with water.



4. Test the other foods, rinsing and drying your tongue in between. What has happened to your sense of taste?

What's going on?

To be able to taste dry food, you need to mix it with saliva first. The taste can only be detected by the taste buds on your tongue after chemicals in the food have been dissolved in saliva. When you dry your tongue, there is no saliva, which makes it difficult for you to taste the dry foods.