Name: _____ Date: _____

The Tongue Map That Never Existed

Circle group

You may have seen a picture of the tongue in zones. The tip says sweet. The sides say sour and salty. The back says bitter. Schools taught this for years. But it is a myth.

Your tongue has tiny bumps. Taste buds sit on the bumps. Each taste bud has little cells. They can notice sweet, sour, salty, bitter and savory tastes. These cells are all over the tongue. You can notice a sweet taste at the back. You can notice a bitter taste at the tip.

You can test the old map with a grown-up. Put a tiny drop of juice on different spots of a clean tongue. You taste it wherever you put it.

Some spots may notice a taste a little more. But the difference is small. The old map made each taste seem to live in its own place. Really, your whole tongue is a team. Every part can taste almost everything.

Questions

1. What did the old map say the tip of the tongue tastes?

_____

_____

2. Where do the taste buds sit?

_____

_____

3. Can you name two of the five tastes?

_____

_____

4. How can you test the old map?

_____

_____

5. Why does the writer call the tongue a team?

_____

_____

6. If the map were true, what would you not taste at the back of the tongue?

_____

_____

Words to know

myth: an idea many people believe that is not true
taste buds: tiny parts on the tongue that notice flavors
savory: a rich, meaty kind of taste

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

The Tongue Map That Never Existed

Triangle group

You may have seen a picture of the tongue split into zones. The tip is marked sweet, the sides are marked sour and salty, and the back is marked bitter. For many years, schools taught this idea. It turns out to be a myth.

Your tongue is covered with tiny bumps, and on the bumps are taste buds. Each taste bud holds little cells that can notice sweet, sour, salty, bitter and savory tastes. These cells are spread over the whole tongue. You can notice a sweet taste at the back of your tongue, and you can notice a bitter taste at the tip.

You can test the old map with a grown-up. Touch a tiny drop of juice to different spots on a clean tongue. You will notice the flavor wherever you put it.

Some parts of the tongue may be a little more sensitive to certain tastes. But the difference is small. The old map made it seem as if each taste lived in its own neighborhood. In truth, your whole tongue works as a team, and every part of it can taste almost everything.

Questions

1. What did the old tongue map say about the tip of the tongue?

_____

_____

2. Where are the taste buds found?

_____

_____

3. Can you name two of the five tastes the cells can notice?

_____

_____

4. How can you test the old map at home?

_____

_____

5. Why does the writer say the tongue works as a team?

_____

_____

6. If the old map were true, what would happen when juice touched the tongue's back?

_____

_____

Words to know

myth: an idea many people believe that is not true
taste buds: tiny parts on the tongue that notice flavors
savory: a rich, meaty kind of taste
sensitive: quick to notice something
flavor: the taste of a food or drink

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

The Tongue Map That Never Existed

Square group

You may have encountered a diagram of the tongue divided into separate zones. The tip is labeled sweet, the sides are labeled sour and salty, and the back is labeled bitter. For many years, classrooms taught this idea as fact. It turns out to be a myth.

Your tongue is covered with tiny bumps, and embedded in those bumps are taste buds. Each taste bud contains small cells that can detect sweet, sour, salty, bitter and savory tastes. These cells are distributed across the entire tongue. You can detect a sweet taste at the back of your tongue, and you can detect a bitter taste at the tip.

You can test the old map yourself with a grown-up. Touch a tiny drop of juice to several different spots on a clean tongue. You will notice the flavor wherever it lands.

Certain areas of the tongue may be slightly more sensitive to particular tastes, but the difference is small. The old map made it seem as though each taste lived in its own neighborhood. In reality, your whole tongue works as a team, and every part of it can taste almost everything.

Questions

1. According to the old diagram, which taste belongs to the tip of the tongue?

_____

_____

2. Where are the taste buds found?

_____

_____

3. Can you name two of the five tastes that the cells can detect?

_____

_____

4. How can you test the old map at home?

_____

_____

5. What does the writer mean by saying the tongue works as a team?

_____

_____

6. If the old map were true, what would happen with juice at the back of the tongue?

_____

_____

Words to know

myth: an idea many people believe that is not true
taste buds: tiny parts on the tongue that notice flavors
savory: a rich, meaty kind of taste
sensitive: quick to notice something
flavor: the taste of a food or drink

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: The Tongue Map That Never Existed

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: The Tongue Map That Never Existed

Easier · 157 words · Flesch-Kincaid grade 1.8

1. Sweet things.
2. On the tiny bumps of the tongue.
3. Any two of sweet, sour, salty, bitter and savory.
4. Put a tiny drop of juice on different spots of a clean tongue, with a grown-up.
5. Every part can taste almost everything.
6. Sweet things, but you do taste them there.

Triangle: The Tongue Map That Never Existed

This passage · 188 words · Flesch-Kincaid grade 4.1

1. That it tastes sweet things.
2. On the tiny bumps that cover the tongue.
3. Any two of sweet, sour, salty, bitter and savory.
4. Touch a tiny drop of juice to different spots on a clean tongue, with a grown-up.
5. Every part of it can taste almost everything.
6. You would taste only bitter flavors there, but you taste the sweetness anyway.

Square: The Tongue Map That Never Existed

Harder · 192 words · Flesch-Kincaid grade 6.1

1. Sweet.
2. Embedded in the tiny bumps that cover the tongue.
3. Any two of sweet, sour, salty, bitter and savory.
4. Touch a tiny drop of juice to several spots on a clean tongue, with a grown-up.
5. Every part of it can taste almost everything.
6. You would detect only bitterness there, but you taste sweetness there as well.