Name: Class:

Cutting Onions

Have you ever seen someone get tears in their eyes while cutting an onion? Maybe you wondered why cutting an onion made them sad. Chances are they weren't sad; they just got some onion gas in their eyes.

What's onion gas? When you cut into an onion, you release a gas called propanethiol S-oxide. That's a big word! Propanethiol S-oxide is a gas containing sulfur and it travels right up to your eyes. When it hits your tears, it forms sulfuric acid. Since this acid burns, your eyes try to make more tears to wash it away.

If you don't want to cry when cutting an onion, the solution is simple: don't let the gas hit your eyes. Some people wear goggles while cutting onions. Others just look away when they cut into the onion. You can also freeze the onion a little before cutting into it because the cold makes it harder for the gases to escape.

Be careful not to wipe your face while cutting an onion, too. The gas and sulfur can get on your hands and cause your eyes to burn even more.

So next time you see someone crying while cutting an onion, don't tell them to cheer up. Instead, hand them a pair of goggles and let them chop away.

1. When you cut open an onion, what happens first?

1. Your eyes make more tears.
2. The gas hits your tears.
3. A gas is released from the onion.
4. Sulfuric acid is made.

2. Which is NOT a way to keep the onion gas from hitting your eyes?

1. Wearing goggles
2. Cutting the onion slowly
3. Looking to the side
4. Freezing an onion

3. It is possible to cut an onion without crying.

1. True
2. False

4. Which choice best explains why onions make people cry?

1. Onions increase your body's hormones and make you sad.
2. Gas from the onion mixes with tears to create an acid the body tries to wash away.
3. Tears help prevent the onion's gas from reaching the eyes.
4. Onions combine with tears to create a salty flavor that improves the onion.

LIVEWORKSHEETS