# Tears - Why do you cry tears?



### **Fact**

- There are two reasons why our eyes produce tears. 1 When
  our eyes are irritated or sore, our eyes automatically wash out the irritation with tears (reflex
  tears). 2 When we feel very happy or very sad we cry tears (emotional tears).
- Tears are salty, watery secretions that help to keep the eye moist and lubricated.
- Our tear ducts (duck-ts) are found in the inside corners of our lower and upper eyelids which is where our tears come from.
- Tears flush out things that aren't supposed to be in your eyes like bits of dust and grit.
- Tears also have a natural antiseptic called Lysozyme, which helps to keep our eyes free of infections.

## Do you know

- Tear ducts are the drainpipes of your eyes, and most of the tears run down these "drainpipes" into the back of your nose. That's why you get a runny nose when you cry.
- Onions produce the chemical irritant known as syn-propanethial-S-oxide. It stimulates the eyes' glands so they release tears.
- Humans are the only animals that cry emotional tears.
- Blinking helps to push the tears over your eyes to wash the grit and grime out. Blinking also helps protects your eyes by keeping dust and grit out of your eyes.

## **Experiments you can do**

Does onion make you cry? Get an adult to cut up an onion for you. Does the onion make them cry while they're cutting it up?

Conduct a survey of your friends and family. On a piece of paper write the names of your family members (including your Grandparents) and write their age beside their names. Interview friends and family to see if they cry tears when peeling and cutting onions and what methods they might use to keep from crying. What other things make them cry?

Put a list together of all the different ways to cut up onions so they don't make you cry. Get your family to try the different ways and see which one works best for them.

### Other Investigations

Examine your eyes carefully in a mirror and see if you can find your tear ducts. They are tiny little holes in the corners of your eyes nearest your nose.

#### Jokes

Why did the paper cry? Because it had a tear in it.

Why did the girl cry when she wasn't even sad? Because she was peeling onions. From Sydney and Litia Watson