

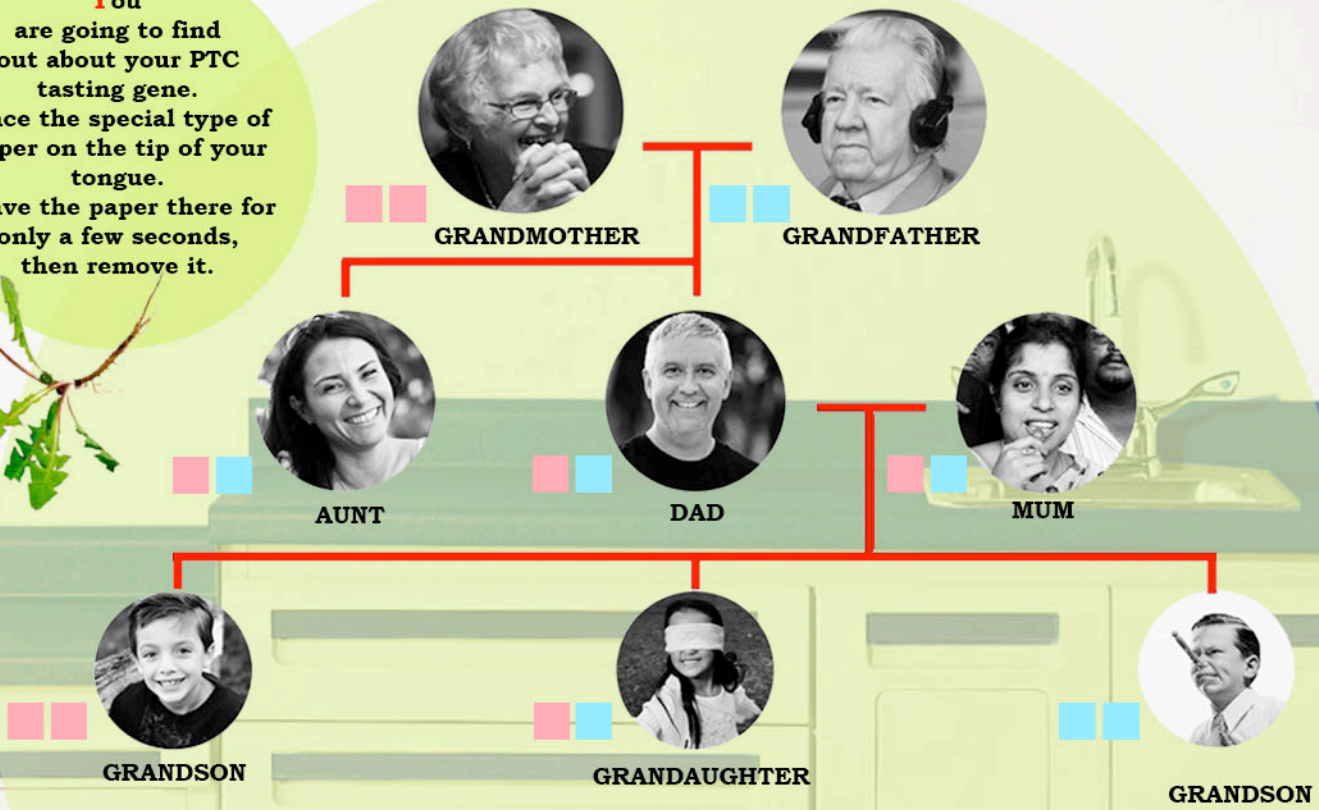
# TASTE: TASTE and INHERITANCE

## BIG QUESTION: Do we taste what our parents did?



In 1931, a chemist called Arthur Fox was working in his laboratory with a powder called PTC. Arthur had an accident and spilled some powder which blew into the air. Another scientist who was working with him complained that he could taste a strong bitterness in the air. Arthur, on the other hand, could taste nothing. Being good scientists and naturally curious, Arthur and his colleague asked lots of other people to taste the powder. Some tasted nothing at all; others found it very bitter indeed, with the rest finding it only slightly bitter. Fox was extremely puzzled by this and decided to investigate further.

**You** are going to find out about your PTC tasting gene. Place the special type of paper on the tip of your tongue. Leave the paper there for only a few seconds, then remove it.



- Version of the gene that means PTC has no taste
- Version of the gene that means PTC tastes bitter
- A pairing of both genes means that PTC has no taste

- C**an you determine whether you have inherited the non-taster PTC gene or the super-taster PTC gene?
- C**an you taste the bitterness a lot, a little or not at all?
- D**o you taste anything? If not, don't hold the paper there for too long!
- W**hy do you think some people could taste the bitter PTC, others only slightly and some tasted nothing at all?
- I**f you can't taste PTC it is not a bad thing. You may taste other types of bitter compounds, that other people can't detect.



**You** may have inherited your ability to taste PTC from your parents. PTC will either taste very bitter, slightly bitter or tasteless depending on the genes of the taster.