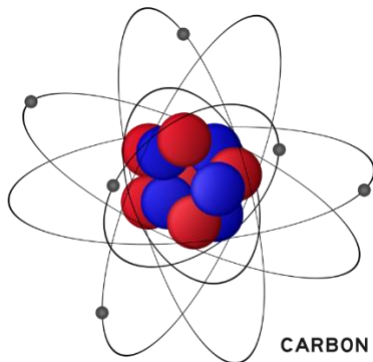


## Some carbon

Look, we can't ignore carbon forever.

We already know about gold and helium and oxygen – these are elements. That means they are the same all the way through and each is made up of their own special atoms.

An atom of gold is different to an atom of helium or an atom of oxygen. Carbon is also an element and has its own sort of atom.



[Pixabay "Free download". Many thanks  
<https://pixabay.com/illustrations/carbon-hydrogen-atom-molecule-2222968/>]

Here is a carbon atom. It has 6 electrons going around the outside and its mass number is 12. [It is smaller than oxygen which has 8 electrons and a mass number of 16]

Carbon is an amazing element.

What does carbon look like when you have a big hunk of nothing but carbon atoms? One of the amazing things about carbon is that it can take one of two forms. A big hunk of carbon can be a diamond,



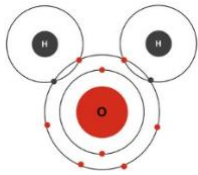
Show your parents  
Chapter 30.

or it can be coal [dirty black stuff we burn in fires].



## Carbon dioxide

In Chapter 25 we talked about water, which is one oxygen atom attached to two hydrogen atoms. [This joining of atoms makes a molecule.] We said H<sub>2</sub>O looks like Mickey Mouse.



Now, we have to think about carbon holding onto 2 oxygen atoms. This molecule is called 'carbon dioxide' [di means two] – CO<sub>2</sub>.



[YWD. <https://ya-webdesign.com/explore/co2-drawing-carbon-dioxide/>]

This is another way of showing a molecule of CO<sub>2</sub>.

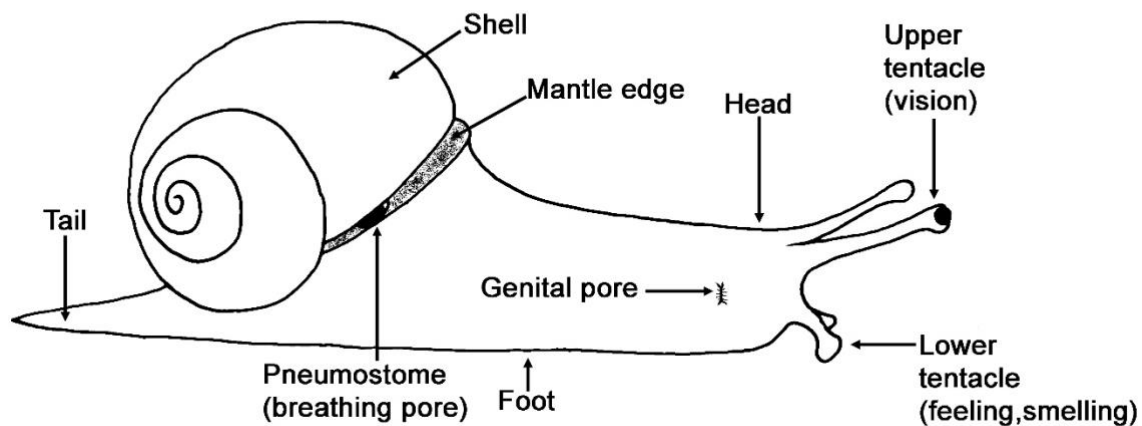
OK, it's a good idea to keep breathing. Why?

Because we need to get oxygen into our bodies to stay alive!

That's a pretty good reason.

There is one other reason for breathing – because when we breathe out, we get rid of [breathe out] carbon dioxide. We make carbon dioxide in our bodies and too much carbon dioxide can kill us – the same as not enough oxygen.

## Snailing



Here's something more interesting – snails are able to see using the two big tentacles which come out of the top of their head – we think of these as being like eyes. Snails are able to smell using the shorter tentacles which come out of the front of their heads – we think of these as being like noses.

On the side, just under the edge of their shell [exoskeleton] they have a 'Pneumostome'. 'Pneu' is an old Greek word for wind or air – and 'stome' means opening or mouth – so that black mark under the edge of the shell is a breathing opening or mouth.

So, snails see and smell with parts of their head – but they take air in on their side.

Interesting that they have only one foot, but it works like a conveyor belt.

**Knock, knock.**

**Who's there?**

**Funnel.**

**Funnel who?**

**The Funnel start once you let me in!**

## The Water Strider



[Author: Apple 2000  
[https://commons.wikimedia.org/wiki/File:Water\\_strider\\_Gerridae.jpg](https://commons.wikimedia.org/wiki/File:Water_strider_Gerridae.jpg)]

The 'water strider' is an insect which can run across the water in ponds and slow streams without drowning. It is very light so that helps, but the most important feature is the underside of its body is covered with hairs which repel water.

**Q: When will the little snake arrive?**

**A: I don't know, but he won't be long.**

**Q: Why should you not let a bear operate the remote?**

**A: He will keep pressing the paws button.**

**Q: Why did the man get fired from his job at the coin factory?**

**A: He stopped making cents.**

**Q: Why was the road nervous?**

**A: It was about to get graded.**

**Q: Why did the dinosaur refuse to wear deodorant?**

**A: He didn't want to be ex-stink.**

**Q: Why was the weightlifter upset?**

**A: She worked with dumbbells.**

**Q: Why did the pony get sent to his room?**

**A: He wouldn't stop horsing around.**