

Tree rings and things

Tree rings



[From Wikimedia Commons, the free media repository
https://commons.wikimedia.org/wiki/File:Tree_ring_arp.jpg]

You have seen these rings in wood. You can see them most clearly when the trunk of a tree is cut across. If you look closely, there are dark bands and light bands. Each year the tree gets one light band and one dark band. The light band comes when the tree is growing rapidly – when there is lots of sunlight – the dark band comes from when the tree is growing slowly, during the winter. So, if you count the number of dark [or light] bands you will know how old the tree was when it was cut.

Q: Why did the banana go to the doctor?

A: Because it wasn't peeling well.

[This has nothing to do with trees]

Storks

Storks live in many places around the world – they are very big birds – they can be 2 metres across when their wings are spread out. They like wading in river water and eating frogs and beetles and stuff. They have long legs and long beaks – these are good for wading around on the edge of rivers and in swamps, and catching food in the water.

Most of them ‘migrate’ once a year, that means fly a long distance and stay in another place for a few months – then they come back to where they were.

A funny thing is that although they like wading around in water and flying off to distant places, they quite like being close to people. Interestingly, they build HUGE nests – these can be one metre across and one metre high [or more]. It is surprising to see – but in some places these big birds build big nests in cities, on the top of poles or buildings.



[Author: ivabalk (pixabay.com). Needpix.com. Many thanks. <https://www.needpix.com/photo/682259/stork-nest-feeding-nesting-storks-nest-bird-risers-brood-beak>]

How do solar panels work?

Well... if you MUST know, we have to talk about some other stuff first.

Atoms

Everything – your hand, the door, Mummy, the car – everything is made of atoms. There are over a hundred different sorts of atoms, but they are all much the same.

Atoms have two main parts. There is a tiny little bunch of bits [particles] which stick together in the middle – this is called a ‘nucleus’. The second part is tiny, tiny pieces [particles] which whizz around the nucleus – these whizzing pieces are called ‘electrons’ – and in most atoms there are quite a few electrons whizzing around.

Electricity

Electricity is when a particle like an electron passes from one place to another. We usually think of electricity passing along a wire – you have seen wires that go from the wall to the heater, or inside computers.

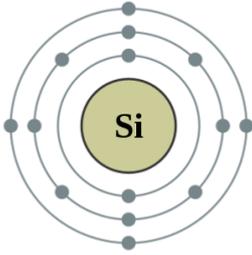
But, what about solar panels?

Yes, well, solar panels are made up of ‘silicon’ [silicon atoms have 14 electrons whizzing around] – and silicon has some special properties.

Show your parents
Chapter 13.

14: Silicon

2,8,4



[Pumbaa (original work by Greg Robson)
https://commons.wikimedia.org/wiki/File:Electron_shell_014_Silicon.svg]

How do solar panels work? Energy from the Sun [light] hits electrons on silicon atoms. Some of these get enough energy to jump off and go along wires – and electrons going along wires is electricity.



[Author: Dan Cook @dan_scape. Many thanks.
<https://unsplash.com/wallpapers/cool/funny>]

Show your parents
Chapter 13.

Q: What do you call a dinosaur that is sleeping?

A: A dino-snore!

Q: What is fast, loud and crunchy?

A: A rocket chip!

Q: Why did the teddy bear say no to dessert?

A: Because she was stuffed.

Q: Why did the student eat his homework?

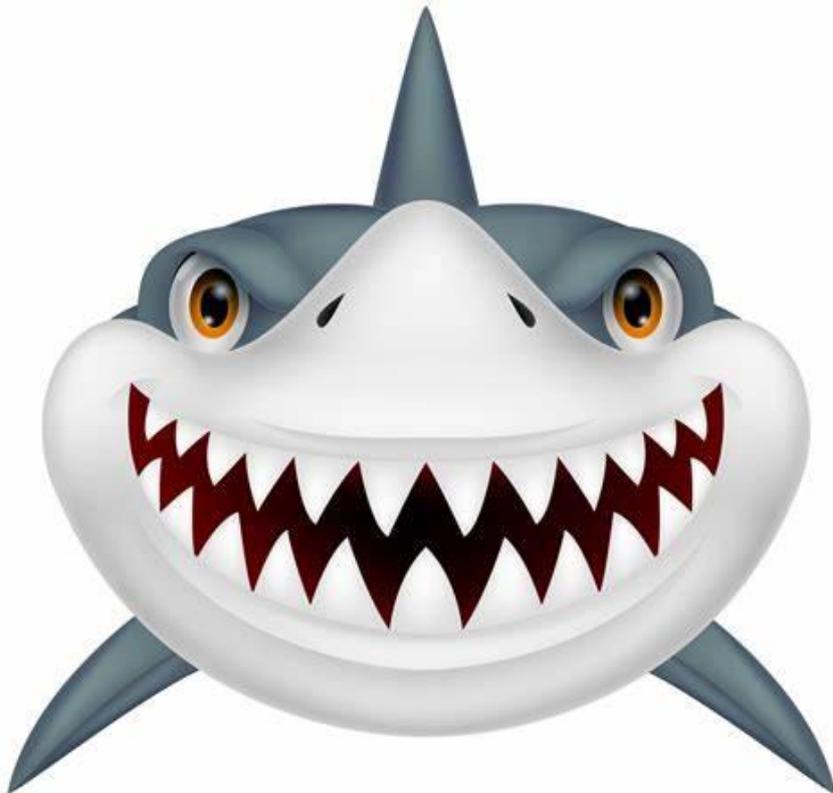
A: Because the teacher told him it was a piece of cake!

Q: When you look for something, why is it always in the last place you look?

A: Because when you find it, you stop looking.

Q: What is brown, hairy and wears sunglasses?

A: A coconut on vacation.



[<https://www.bing.com/images/search?view=detailV2&id=0B4B2DCCE9A42858D70E7178E9CACD40E9C04244&thid=OIP.OcjdFE3yLleYLfpK9cVTAHaHK&exph=3387&expw=3500&q=Free+Art&selectedindex=63&ajaxhist=0&vt=0&eim=1,6>]