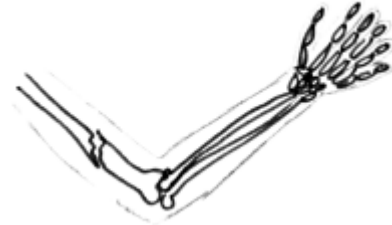


Suzy's World

Bone - How does a bone heal?

Fact

- When your bone is broken a blood clot forms in the break and with the protection of a strong plaster cast and lots of rest, your broken bone starts growing a layer of bone over the break to seal it and heal it.
- Your bones are living things, constantly making new cells and they are normally very strong.
- But when a strong force hits them or they're put under a lot of pressure they can break or snap.
- Your bones have lots of blood vessels running through them to deliver new cells for building new bone.
- Doctors put your broken limb in a hard plaster or fibreglass cast to stop your bones from moving so they can heal more easily.



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Do you know

- Baby's bones are not hard and strong like an adults bones but slowly, year-by-year the bones change and become hard and strong – it's called ossification.
- Your bones use calcium to grow strong and hard.
- Your bone cells are constantly being replaced. (Although an adult might be 35 most of their skeleton is under 10 years old.)
- The strongest bone in your body is your femur – your thighbone.
- The smallest bone in your body is in your ear.
- Your skull is made up of 22 bones

Experiments you can do

You don't get to see human bones very often, if at all, so check out the bones of an animal after the family roast or if you have a pet dog that likes to chew on fresh bones. You might even be able to get someone to cut one open for you.

Think about the things your body can do and how strong your bones must be to enable you to do these things like jumping from high places, lifting heavy things, playing sport and so on.

Other Investigations

How hard is that bone without the calcium?

Suzy's World

What you'll need:

A chicken bone (from a roast dinner or if you've had chicken pieces for tea)
A clean plastic container with a lid, which is big enough to put the bone in.
White vinegar.

What you do:

Enjoy your chicken dinner then clean the bone so there are no scraps of meat or gristle on it. Let the bone dry overnight then put it in the plastic container and cover it with vinegar. Put the lid on and put it some place where it won't be disturbed for 3 days. Take the bone out and rinse it with water. Try bending it and you should find it's rubbery and soft. If it's still hard put fresh vinegar in the jar and leave it for another couple of days.

The vinegar is an acid and it reacts with the calcium in the bone and dissolves it.



Jokes

What did the skeleton say to the human? I've got a bone to pick with you.