

# Cartilage



## Mystery File Question

Is cartilage a bone?

Cartilage helps with flexibility and movement while running.

## I Need My Knees

It is the school's big track and field meet. You are at the starting blocks, ready to race in the 100-meter dash. You set your feet and bend your knees. Suddenly, you hear a pop and pain shoots through your knee! It feels like you broke something. *Ouch!* The doctor looks at your knee. You damaged your *cartilage*.

Cartilage is a soft, flexible material that is found in many areas of your body. It's in your knees, shoulders, hips—even your ears, nose, and throat. Cartilage connects parts of your body to each other. It also stops them from rubbing together.

Unfortunately, the living tissue in cartilage cannot heal itself. Doctors are still trying to figure out the best way to fix damaged cartilage. The best solution for now is to have surgery to replace the cartilage with plastic. Time will tell if doctors can find a better solution.

## Wowser!

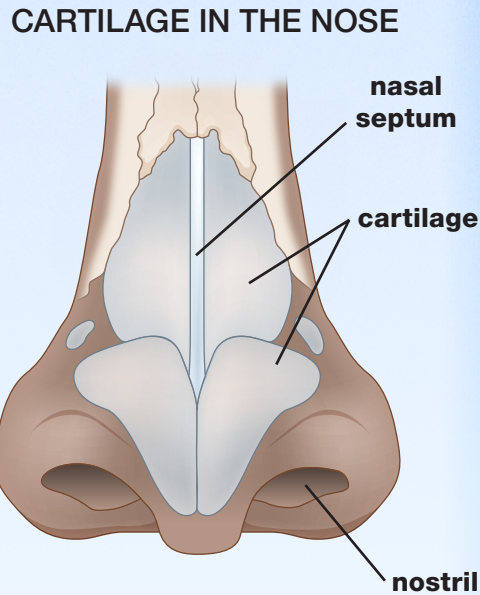
While humans only have a small amount of cartilage in their body, sharks are made up mainly of cartilage, connective tissues, and muscle.



# Wiggle Your Ears, Wiggle Your Nose

Touch your ears and make them move. Your ears are made of cartilage. They can bend and move around with a little tug.

Now touch your nose in the area between your nostrils. It moves, too. This is called the *nasal septum*, and part of it is made of cartilage. It can wiggle because cartilage is flexible. Wiggle the tip of your nose. There is cartilage there, too. It helps make the shape of your nose unique.



## Do You Know?

Some people decide to pierce the cartilage on their ears so they can wear earrings.



## Mystery File Response Sheet

**Key Question:** *What do bones have in common?*

List the details you found in every *I.File* that your team read. Use the **I.Team Evidence** section of your *I.File Response Sheet*.

_____	T F ?
_____	T F ?
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Now decide whether each of the details you listed is also true for the *Mystery File*. Circle one answer for each detail: **T = true** **F = false** **? = not sure**

Did you circle **T** (true) for all the details? **Yes No**

**Mystery File Question:** *Is cartilage a bone?* **Yes No**

Use evidence to answer the Mystery File Question. Write in complete sentences.

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