

Shark Anatomy Puzzle

What's inside a shark? Sharks have skeletons made of cartilage, the same flexible material that gives structure to our ears and noses. While they have a spine, just like we do, they don't have any ribs! Instead of a bony skull like ours, they have a *chondrocranium* made of cartilage. Cartilage also supports other shark body parts, like gills and fins. Can you figure out how this shark's insides match up with its outline?

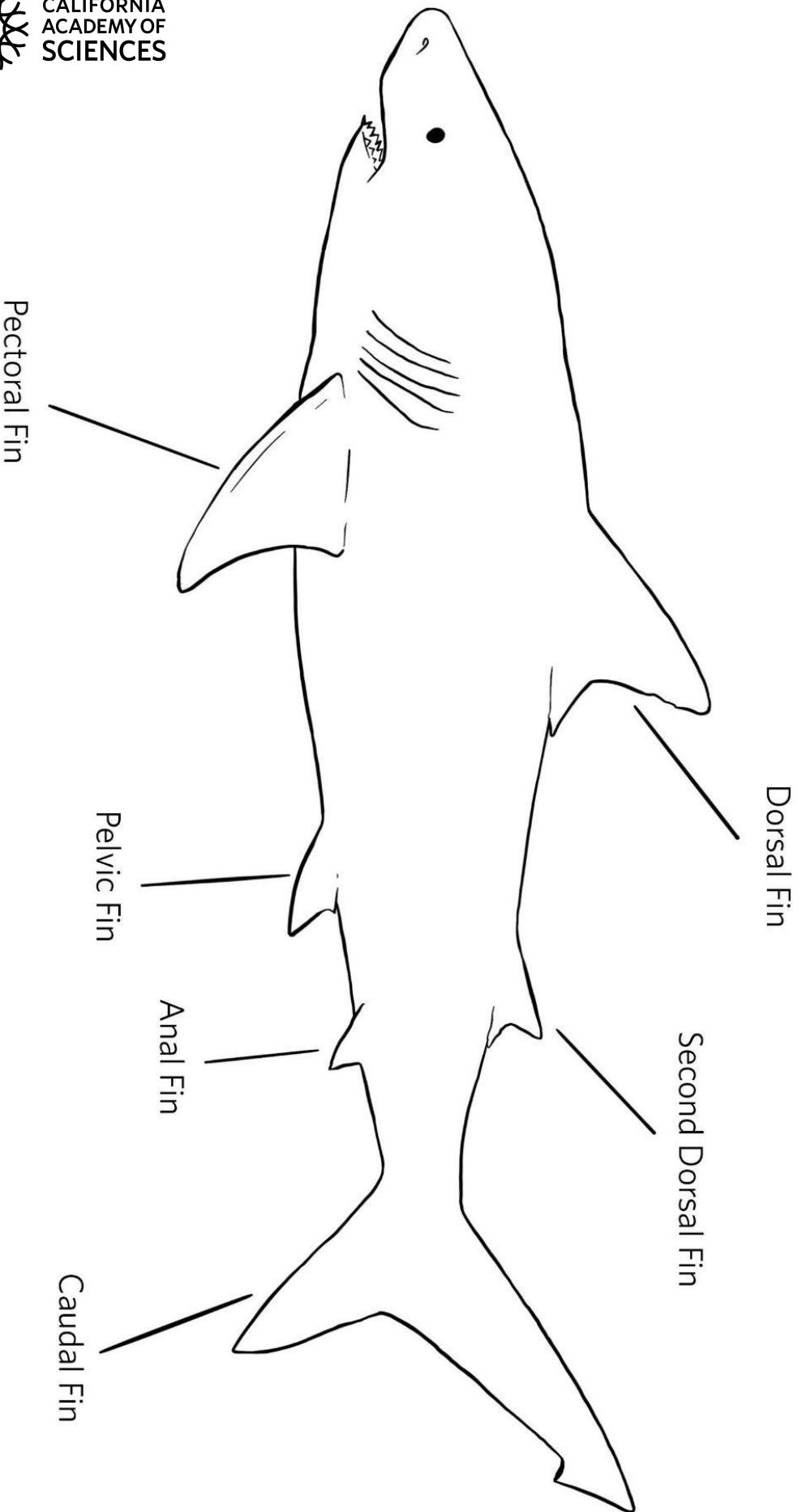
Materials

Print-out templates (pages 2–3)
Crayons or colored pencils (optional)
Scissors

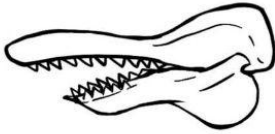
Directions

1. **Print** the shark silhouette (page 2) and shark anatomy pieces (page 3).
2. *Optional:* **Color** the printed templates.
3. **Read** the labels next to the small anatomy pieces (page 3). Based on the clues, where do you think they belong in the shark's body?
4. **Cut out** the small anatomy pieces (page 3). Do any of the pieces look like they fit somewhere on the shark silhouette?
5. **Assemble** the shark anatomy puzzle by arranging the small pieces on top of the shark silhouette. Some pieces may overlap one another.

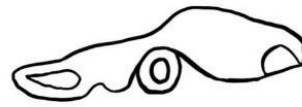
Shark Silhouette



Shark Anatomy Pieces



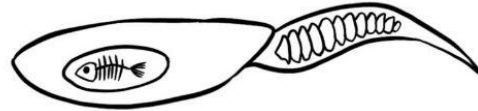
Jaws: Known for their many rows of teeth!



Chondrocranium: Contains the shark's brain.



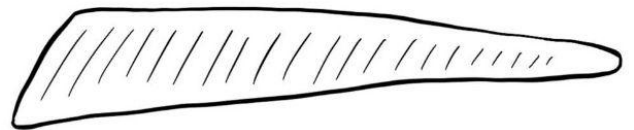
Gill Arch: Water enters through the shark's mouth, then passes through the gills, where the shark gets oxygen. This cartilage supports the gills.



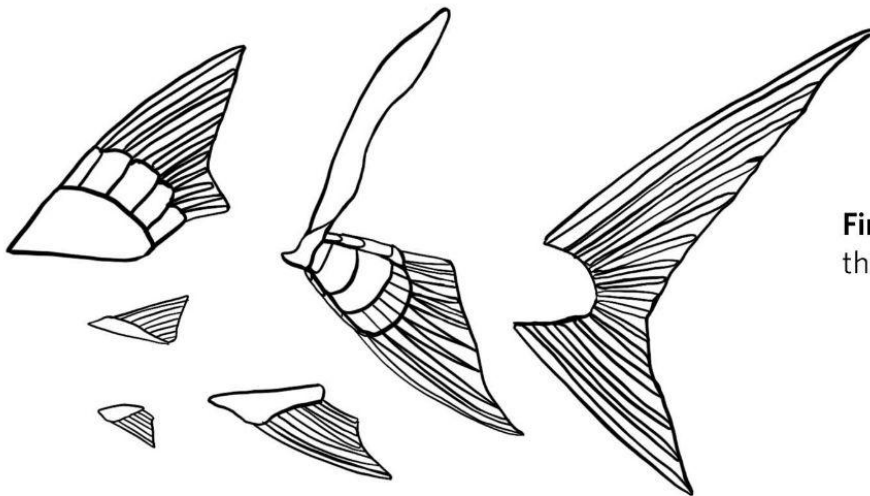
Stomach and Spiral Valve: The Spiral Valve is a corkscrew shaped part of some sharks' intestines. Once sharks have digested their food, the waste exits from their cloaca, near the pelvic fin.



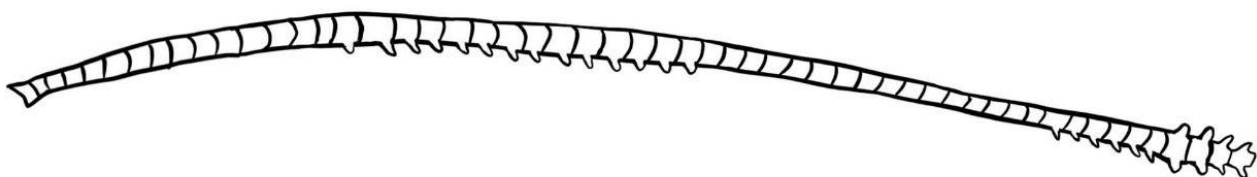
Heart: Sharks' hearts are near their gills, similar to how our hearts are near our lungs.



Liver: A shark's oily liver helps maintain buoyancy so it doesn't sink or float. The liver has one lobe on each side of the body cavity, right underneath the shark's muscles.



Fin Cartilage: Can you match the fins to their outlines?



Spine: Made of cartilage, the spine is like a highway for nerves, which send signals between the brain and body.