

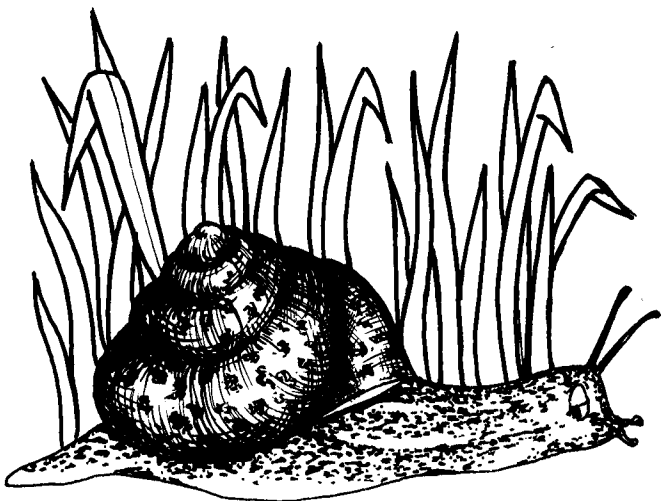
Shells

Student Introduction

Shells have been important to mankind for hundreds of years. People have eaten shelled animals like oysters and clams and have collected and worn shells because of their beauty. Some Indian tribes even used shells as money, which they called “wampum.”

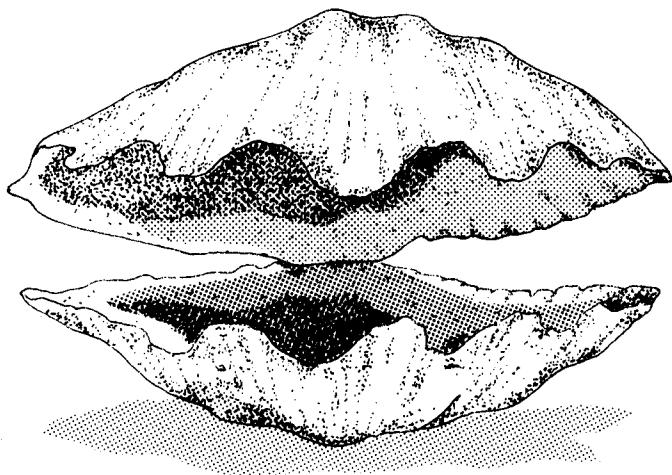
Shells are actually animal skeletons that are worn on the outside. Your own skeleton, with its hundreds of bones, supports the muscles and organs of your body on the inside of your skin. But certain small animals called **mollusks** live inside their skeletons. The skeletons provide them with shelter and with protection from enemies. Mollusks include snails, oysters, and clams, and you can find them easily—at the seashore, in rivers, lakes, and ponds, and on land.

Some mollusks are called **univalves**. “Uni” means one and “valve” is a word for shell. Snails, for example, are univalves because they have only one shell. The shells of univalves take many shapes. One common shape looks like a small ice-cream cone; another looks coiled, like a spiral; and another is shaped like a tiny slipper.



When a univalve (for example, a snail) eats, the animal must come part-way out of its shell. If an enemy comes near—perhaps a hungry crab—the animal quickly retreats into its shell and closes the opening.

Another kind of mollusk is a **bivalve**. “Bi” means two, and these mollusks have two shells that are hinged together. Clams, oysters, and scallops are bivalves. Bivalve shells are usually round or oval, but may also be long, like a cigar, or shaped like an opened fan.



A bivalve gets its food by opening its two shells a little to pump in water. The water carries tiny plants, animals, and minerals that the bivalve eats. Some bivalves have tubes called siphons to draw the water into their shells and then to expel the water when they have taken the food from it. The shells close very tightly when the mollusk is disturbed.

Just as you become taller when your skeleton grows, a shell gets larger as the animal inside it grows. Between the animal and its shell is a fleshy layer called the mantle. The mantle produces a fluid that builds the shell by adding new

layers inside the shell and along its edges. These layers of shell are called **nacre**. When the mantle stops making new layers, the animal has no more room and so cannot grow larger.

Some shells are very small. The periwinkle, a small snail, can be found clinging to a blade of grass in coastal marshes. Others are very large. In the South Seas, for example, there are giant clams so large and heavy that you couldn't even lift one.

You can find a variety of shells in Louisiana. Mussel shells are common in most creeks and ponds. They are oval shells that may be light brown, rose, and purple in color.

The oyster is also common in coastal Louisiana and is the state's most valuable mollusk. Oysters are a favorite seafood, and their shells

are used as a road-building material. Oyster shells are shaped like a small, lopsided saucer. They are light gray on the outside and are very rough to touch. The layers of nacre on the inside of an oyster shell are smooth and white, and may have rainbow-like colors. This shiny white material is called "mother-of-pearl" and is often used to make jewelry.

The periwinkle snail is one of the prettiest Louisiana shells. It is small, cone-shaped, and usually light gray with reddish-brown streaks.

Another shell that is used for paving material is that of the rangia clam. This clam was a major food of certain ancient Indians in Louisiana. The Indians left huge piles of clam shells that can still be found today. These piles are called shell mounds.

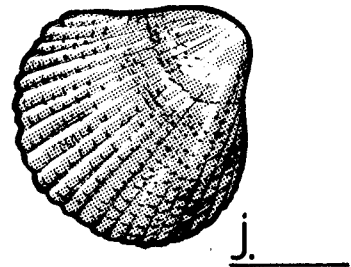
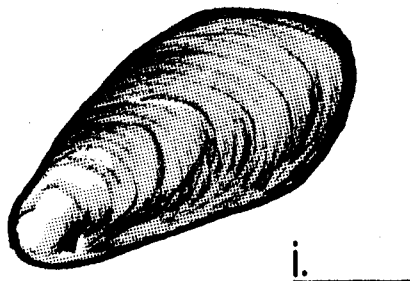
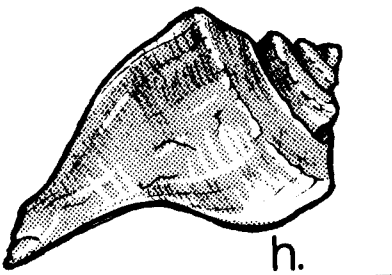
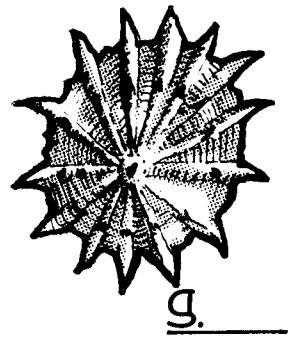
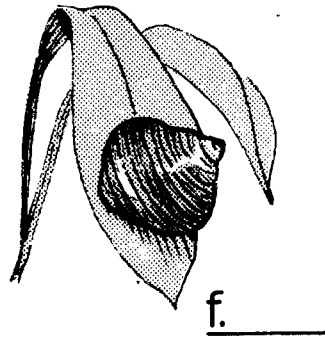
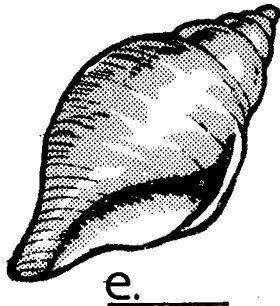
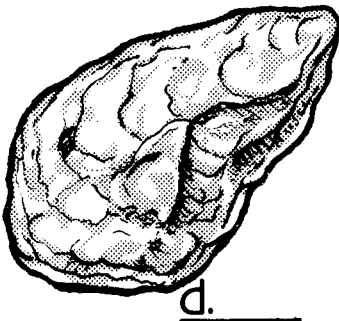
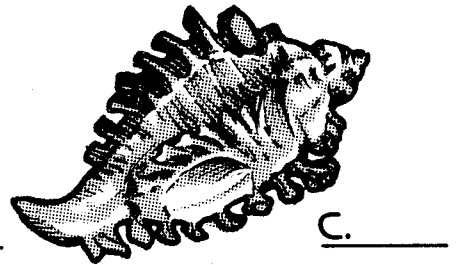
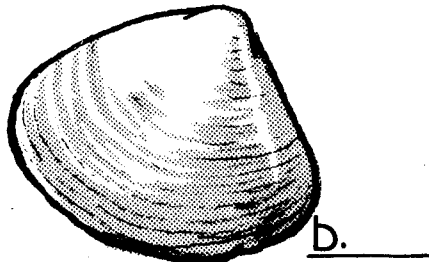
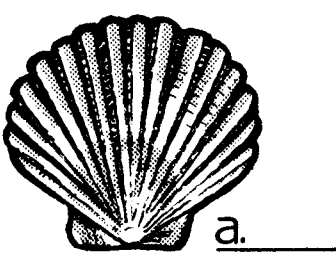


Student Activity: Louisiana Shells

Purpose. To be able to identify shells by their physical characteristics.

Procedure. Match the following descriptions with the appropriate shells pictured by placing the number of the description in the blank by the picture.

1. **Scallop:** ribbed, fan-shaped, "ears" at base.
2. **Oyster:** deeply ridged, rough to touch, gray-white in color, shaped like a lopsided saucer.
3. **Sea Mussel:** an irregular oval in shape, low horizontal ridges, smoother than the oyster.
4. **Cockle:** ribbed, fan-shaped, no "ears" at base.
5. **Clam:** rounded shape, low horizontal ridges, no "ears" at base.
6. **Periwinkle Snail:** small, cone-shaped, climbs marsh grass.
7. **Spiked Limpet:** flat, rough, star-shaped spikes radiating from center.
8. **Whelk:** rounded, like a rolled cone in shape, has a large cavity for animals.
9. **Tulip Shell:** smooth, rounded, like closed tulip petals in shape, circular lines.
10. **Murex:** somewhat like a whelk in basic shape, but having many spines and knobby protrusions that give it a distorted appearance.



Word Scramble: Shelled Animals

Rearrange the scrambled letters to form words.

Kind of Shell
UMSSLE

						*
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Shelled Animal
KOSUMLL

	*			*		
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A Flower-Like Shell
PUTIL

			*	
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Kind of Univalve
SINAL

*			*	
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Word for Shell
EVLAV

	*			
--	---	--	--	--

Mother-of-Pearl
CAREN

*	*			
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Kind of Shell
MALC

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Indian Money
PAWMUM

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Now arrange the starred letters to spell a special word.

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