



Pathfinder's Name

Shells

1. What is the meaning of the term "mollusk?"
- _____
- _____
2. Identify from shells or drawings the following:
- | | |
|-----------|------------------|
| a. Mantle | f. Dorsal border |
| b. Foot | g. Apex |
| c. Teeth | h. Operculum |
| d. Ribs | i. Canal |
| e. Valve | |
3. Are all shells found on beaches? _____
- _____
- Where else are they found? _____
- _____
- What areas of the world offer the largest variety of shells?
- _____
- _____
4. Describe the movement of shells from place to place.
- _____
- _____
5. How do shell animals protect themselves?
- _____
- _____
6. How are shells made and from what materials are they made?
- _____
- _____

- ❑ 7. List and explain five uses made of shells by man.
 1. _____

 2. _____

 3. _____

 4. _____

 5. _____

- ❑ 8. Explain the terms "univalve" and "bivalve" as applied to shells.
 Univalve _____

 Bivalve _____

- ❑ 9. Name in common terms five different classes of shells and name in your collection a shell for each class.

Classes of shells	Shell for each class
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

- ❑ 10. Make a collection of 20 different shells, classify them, and tell where each is found and when it came into your possession.

- ❑ 11. What is the source of pearls? _____
What spiritual lessons does the pearl teach us? Read and discuss *Christ's Object Lessons* by Ellen G. White, pages 115 to 118.

Lesson 1 _____

Lesson 2 _____

- ❑ 12. Match the Bible texts that best answers A-J:
- | | |
|--|--|
| a. Water creatures were created on what day? | Leviticus 11:9,10
Acts 16:14 |
| b. The number of water creatures is innumerable. | Isaiah 50:2
Revelation 21:21 |
| c. Water creatures perish out of water. | 1 Timothy 2:9 |
| d. Job considered coral of great value. | Genesis 1:20, 21 |
| e. Solomon was acquainted with marine life. | 1 Kings 4:33 |
| f. Jesus twice used a shell product to teach a spiritual lesson. | Psalms 104:25
Matthew 7:6; 13:45,46 |
| g. A businesswoman was engaged in selling the famous purple dyes secured from the shellfish Mediterranean Murex. | Job 28:18 |
| h. Paul does not support the wearing of pearls. | |
| i. Shell creatures are unfit for food. | |
| j. The twelve gates of Holy City are twelve pearls. | |

Shells, Advanced

- 1. Have the Shell Honor.
- 2. Define the term "mollusca" or "mollusk."

Mollusca _____

Mollusk _____

- 3. Learn the classification terms of mollusks, know the distinguishing characteristics of each, and become acquainted with several species under each class.

	Classifications	Characteristics	Species
1.	_____	_____	_____ _____ _____
2.	_____	_____	_____ _____ _____
3.	_____	_____	_____ _____ _____
4.	_____	_____	_____ _____ _____
5.	_____	_____	_____ _____ _____

- ❑ 4. Distinguish between univalve and bivalve mollusks from the following considerations:
- | | | |
|-----------------|-----------------|----------------------|
| a. Shell | c. Reproduction | e. Securing food |
| b. Mollusk body | d. Movements | f. Self-preservation |

Univalve _____

Bivalve _____

- ❑ 5. Identify from shells or drawings and know the meaning of the following conchological terms:

Valve _____

Apex _____

Aperture _____

Byssus _____

Canal _____

Concentric lines _____

Epidermis _____

Foot _____

Lips _____

Mantel _____

Mother of pearl _____

Operculum _____

Ribs _____

Spines _____

Teeth _____

Whorls _____

- 6. Explain the development of a shell.

How long do mollusks live?

- 7. Give some facts about the life of a strombus pugilis (fighting conch) and explain why this shell is so named.

□ 8. Explain the activities of the shipworm.

□ 9. What accounts for the distribution of mollusks.

□ 10. Name two mollusks that have no shells.

1. _____ 2. _____

□ 11. Find answers for the following interesting questions:

a. How are bivalve and univalve animals fastened to their shells?

Bivalve _____

Univalve _____

b. How is shell color controlled? _____

c. What mollusk has four gills? _____

d. From what sea animal was India ink formerly made? _____

e. What mollusk spins a silken thread? _____

f. What shells were used for money by ancient tribes? _____

g. What shell is considered sacred by the Tibetans? _____

h. Purple dye of ancient times came from the secretion of what mollusk? _____

i. What is the source of pearls? _____

How are they formed? _____

12. Name six commercial uses for shells.

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

13. Do one of the following:

- a. Personally find and collect 40 species of shells representing the five classifications. List each shell as to the place and date it was found, common name, scientific name, and class.
- b. Make a collection of 50 species of shells you have found, received, or purchased representing the five classifications. List each shell collected as follows: if personally found, give the information called for under letter "a" above; if received or purchased, give the name of the person from whom the shell was received, the habitat of the shell, the date of its acquisition, and its common name, scientific name, and class.