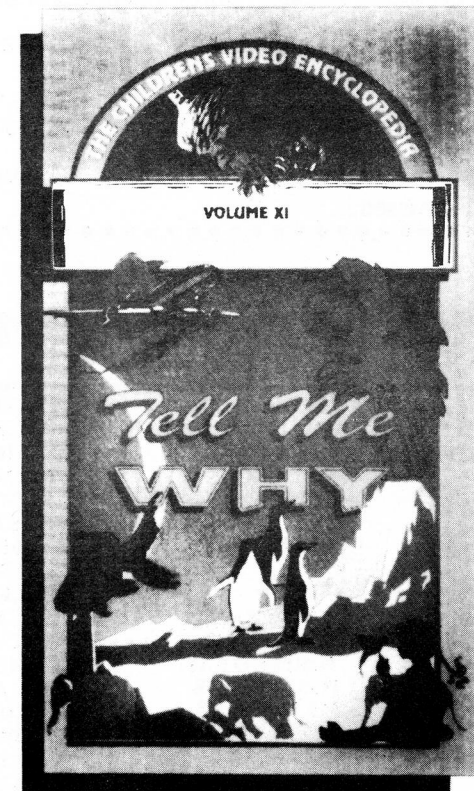


GLOSSARY

1. ALIMENTARY CANAL-the passage in the body that food goes through.
2. BARNACLE-small shellfish that attaches itself to any convenient surface and actually loses its power of movement.
3. BRINE-salty water.
4. BYSSUS-threads produced by a gland in the foot.
5. CARTILAGINOUS-having a skeleton made up mainly of cartilage.
6. CATFISH-any of a large group of scaleless fishes with long feelers (called barbels) somewhat like a cat's whiskers, about the mouth.
7. CEPHALOPOD-head footed animal.
8. CLAM-bivalve mollusk.
9. CRUSTACEAN-hard shelled animal.
10. DEMERSAL EGG-egg that is heavier, yolky, and sinks.
11. DENOVIAN PERIOD-characterized by the dominance of the fish and the appearance of the first amphibians.
12. ECHINODERM-spiny skinned.
13. EEL-fish with backbones that live in water and breathe through the gills; snake like appearance.
14. FEEDING FRENZY-time when sharks become so excited that they start biting anything.
15. FLAGELLA-long lashers at the end of column shaped cells of sponge.
16. FLATFISH-a fish with a flat body and both eyes on the uppermost side; sole, flounder, fluke, halibut, and turbot.
17. FOSSIL-hardened or petrified plant or animal.
18. GILL-breathing apparatus of a fish.
19. GUPPY-tiny freshwater fish found in Barbados, Trinidad, and Venezuela.
20. HORSESHOE CRAB-living fossil.
21. JELLYFISH-animal without a skeleton.
22. MANTLE-the membranous flap or folds of the body wall of a mollusk or similar organism, containing glands that secrete a shell forming fluid.
23. MOLLUSK-soft bodied invertebrate, often in a shell.
24. MUCUS-slimy body secretion.
25. NUISANCE-source of annoyance.
26. OCTOPUS-soft mollusk with eight arms.
27. ORDOVICIAN PERIOD-characterized by an abundance of invertebrate life.
28. OVIPAROUS-fish that emit eggs.
29. OYSTER-edible mollusk.
30. PELAGIC EGG-tiny, transparent, and doesn't have much yolk.
31. PHOSPHORESCENT-group of squid that gives off light; light organs are on the arms.
32. PILCHARD-fully grown sardine, about ten inches long.
33. PLACODERM-early jawed fish.
34. POLYP-small aquatic organism.
35. PORIFERA-family of sponges.
36. PREDACIOUS-preying on other animals, fish, or insects.
37. PRIMITIVE-earliest.
38. SARDINE-small fish which belongs to the herring family.
39. SCALLOP-large muscle of certain mollusks.
40. SEA HORSE-semitropical fish with head of a horselike form.
41. SEPIA-inky fluid.
42. SILURIAN PERIOD-characterized by the appearance of scorpions (the first land animals) and extensive coral reefs.
43. SIPHON-tubelike organ used for drawing in or ejecting liquids; necklike portion of a clam.
44. SNAIL-crawling mollusk with a shell.
45. SPAWN-mass of eggs emitted by fishes, mollusks, crustaceans, amphibians, etc.
46. TENTACLE-grasping or feeling attachment of an invertebrate.
47. TRANSPARENT-passing light and images.
48. VIVIPAROUS-fish that give birth to living young.

Tell Me WHY TEACHER'S GUIDE



VOLUME XI
FISH, SHELLFISH & OTHER
UNDERWATER LIFE

SUGGESTED TEACHING STRATEGIES

1. If a public aquarium or fish hatchery is near your school, ask a representative to speak on native fish of North America.
 2. Let students participate in the setting up of a classroom aquarium. Be sure to select hardy varieties. Have students observe fish behavior as it relates to other fish, food, and specific territories in the aquarium.
 3. Read books or write reports on sharks. Help students understand that most sharks are of no threat to man.
 4. Let students research the use of mollusk shells as a source of jewelry and trade in primitive cultures. Show examples of their use today.
 5. On a world map, prepare students for various locales discussed in the video, (i.e., Bermuda, Nicaragua).
 6. Let students examine a variety of man made and natural sponges.
 7. Introduce students to the geologic timetable in order to prepare them for periods discussed.
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CONCEPTS AND TERMS

FOSSIL
JAWLESS FISHES
ELECTRIC CATFISH
SKELETON
BIVALVUE
GILLS
EEL
FLYING FISH
MOTHERS OF PEARL
ECHINODERM
OVIPAROUS
BRITISH MUSEUM
SEPIA
ORDOVICIAN PERIOD
PRIMITIVE
FEEDING FRENZY
SEA WASP
PHOSPHORESCENT
SHARK
BERMUDA
SUCKERS
MANTLE

BEROD POUCH
WHALE SHARK
VENOM
GILL BOOKS
SILURIAN PERIOD
CARTILAGINOUS
FISHES
CARP
POLYPS
PORIFERA
SWORDFISH
TORPEDO RAY
PORTUGUESE
MAN-OF-WAR
CEPHALOPOD
LUNGFISH
BASKING SHARK
EGGS
DEVONIAN PERIOD
BONY SKELETON
SPAWNING
WHELKS

PLACODERMS
SUNFISH
FRESH WATER SHARK
SPERM CELLS
CRUSTACEAN
VEGETARIAN
SARDINE
LIMESTONE
SCALES
ELECTRIC EEL
TENTACLES
ALIMENTARY
GILL ARCHES
MUCUS
GUPPY
SHELLS
NICARAGUA
FEELERS
OCTOPUS
SIPHON

QUESTIONS FOR THOUGHT, DISCUSSION AND FURTHER STUDY

1. Contrast true bony fishes with the sharks, rays, and skates.
2. Do a report on commercial fish farming of the catfish.
3. Do fish really "breathe"? research how fish actually exchange gases to and from their environment.
4. Roughly estimate (using the world map) the distances that must be traveled by migrating North America and European eels. What obstacles may be encountered?
5. Read about and report on the adaptation of electrical production in some species of fish.
6. Research and report on the commercial production of caviar.
7. Describe the unusual characteristics of the octopus and compare them to its close relative, the squid.
8. Why are some coelenterates unwelcome swimming companions? Do you know of such unwary swimmers?
9. Study the lifecycle of the oyster. Contrast its mobile juvenile phase with that of a sedentary adult.
10. What is meant by "clamming up"? Have you ever observed such an occurrence?
11. Study one of the land crabs and contrast its existence with crabs found in the ocean.
12. Read about the unusual reproduction of the Crown of Thorn's starfish and how it represented a potential threat to the existence of the Great Barrier Reef. What is its status today?
13. Describe the unusual brood behavior of the male and female seahorse.

..... CAREER OPPORTUNITIES

COMMERCIAL FISHERMAN

RESTAURANTEUR

WILDLIFE BIOLOGIST

AQUARIUM CURATOR

PET STORE OPERATOR

JEWELER