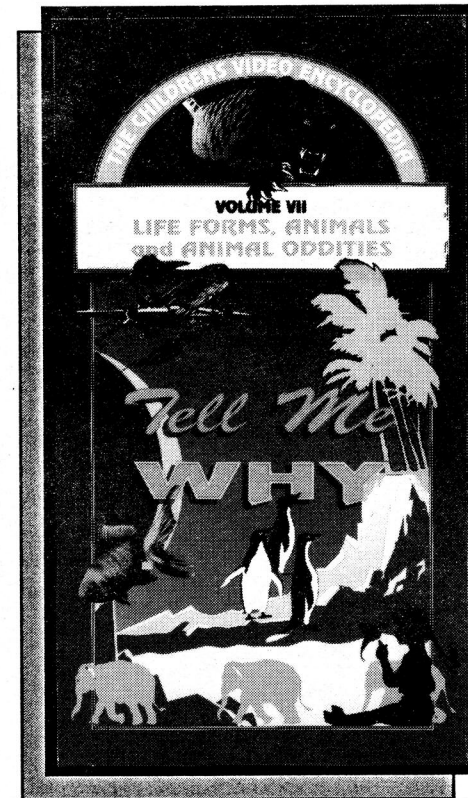


GLOSSARY

1. AMPHIBIAN-cold-blooded animal that lives both in water and on land.
2. ANCESTOR-a person or thing from which one is descended.
3. ANIMAL-a living thing that is not a plant.
4. ANNELID-a worm with a body made of joined segments or rings.
5. ANTEATER-a slow moving animal that has no teeth.
6. BURROW-animal's hole in the ground.
7. CARNIVORE-animal who eats meat; flesh-eating mammal.
8. CHEETAH-hunting leopard of Africa; fastest animal in the world.
9. COLD-BLOODED ANIMAL-animals who lay eggs and, in most cases never see their own young; animals with blood at the same temperature as the environment.
10. COLLECTIVE DENTITION-the different kinds of teeth, one alongside another, enabling man to eat a mixed plant and animal diet.
11. COMMUNICATION-a giving and receiving of information, signals, or messages by talk, gestures, writing, etc.
12. CRYSTALLINE-clear transparent mineral.
13. DOMESTICATE-tame.
14. EARTHWORM-a burrowing worm.
15. ECHIDNA-one of the egg-laying mammals found in Australia and New Guinea; also known as "spiny anteater".
16. ELIMINATE-get rid of.
17. EMOTION-state of feeling.
18. ENDANGERED SPECIES-a class of animals exposed to danger of extinction.
19. EXPERIMENT-test to discover or check something.
20. FILAMENT-fine fiber.
21. FIN-winglike organ on fishes.
22. FLATWORM-a worm with a flattened body, containing both sexes within itself.
23. GENERATION-all individuals born in one period; a period of about 30 years.
24. GESTURE-expressive movement of body, head, etc. act of demonstrating attitude or emotion.
25. GLACIER-mass of ice moving slowly down slope.
26. GLOW-brightness; shine.
27. HERBIVORE-an animal who lives on vegetable matter.
28. HIBERNATE-winter sleep; the spending of winter in a dormant state.
29. HOMEOTHERMIC-animal whose body temperature is not affected by the temperature around him.
30. ICE AGE-glacial period.
31. INFECTION-affect with germs or a virus.
32. INSTINCT-natural impulse or talent.
33. INTELLIGENCE-ability to learn and understand.
34. INVERTEBRATE-animal without a backbone.
35. PANTING-breathing hard and quickly.
36. PARASITE-animal or plant that lives on another organism.
37. PLATYPUS-small Australian aquatic mammal.
38. POIKILOTHERMIC-animal whose body temperature changes with the temperature around him.
39. PREY-animal hunted as food by another animal.
40. PROTOZOA-one-celled animal, usually microscopic, belonging to the lowest division of the animal kingdom.
41. REASON-the ability to think or argue logically; sound judgement.
42. REFLECTION-return, as images, light, etc.
43. REMNANT-small remaining part.
44. REPTILE-creeping animal, as lizard or snake.
45. SEGMENT-divide into parts; sections.
46. SILKWORM-caterpillar that spins silk to make its cocoon.
47. SMELL-sense perceived by the nose and olfactory organs.
48. SPASM-sudden involuntary muscular contraction.
49. SPAWN-to produce or deposit eggs.
50. SPECIES-class of related individuals.
51. TASTE-sense by which flavor is perceived.
52. TASTE BUDS-nerves located on the tongue.
53. THREADWORM-any of a group of threadlike, parasitic worms; especially, the pinworm.
54. VERTEBRATE-animal having a backbone.
55. WARM-BLOODED ANIMAL-animal who gives birth to live young and cares for them during the earliest stages of their lives.
56. WORDS-group of letters or sounds that represent a concept.
57. WORM-boneless animal, having an underside fitted for crawling and a more or less definite head end.

Tell Me WHY TEACHER'S GUIDE



VOLUME VII LIFE FORMS, ANIMALS, & ANIMAL ODDITIES

SUGGESTED TEACHING STRATEGIES

1. Assign students to research several of the diseases mentioned in the program. (i.e., Malaria, Yellow Fever, Hookworm, Trichina, Tapeworm).
2. Tell the story of Dr. Edward Jenner and how he developed the first procedure for vaccination.
3. Bring in sweet, sour, salty, and bitter foods. Allow students to "map" their tongues.
4. Ask students to become animal behaviorists. Assign at-home projects such as watching a pet as it "communicates"; watching other students for non-verbal communication; watch animals during experiments involving problem-solving. Tell students about the experiments of Pavlov and Lorenz.
5. Have students construct a bar graph of body temperature ranges discussed during the program, or speeds in running, or size in tons.
6. Provide world maps. Ask students to choose a migratory animal. Research its route, trace it on the map, and report it to the class.
7. Discuss the geologic timeline in order for students to gain a perspective of time.
8. Assign reports on such topics as how the Chinese cultivate "silkworms" or how the earth worm helps soil, or the importance of the domesticated Camel and Yah to the people in their region of the world.
9. Discuss the differences among the Monotreme, Marsupial, and Placental Mammals.
10. Obtain charts for testing colorblindness in humans. Test the class, keeping notes on whether the student is male or female. Ask students to prepare a pedigree if their families have colorblind members.
11. For younger children: Using familiar objects, demonstrate the relative size of well known animals. Have students speculate as to how size can dictate where an animal can live.

CONCEPTS AND TERMS TO LISTEN AND WATCH FOR:

PROTOZOA	CRYSTALLINE	FREE-LIVING
COLD-BLOODED	PANTING	MONOTREME
INTELLIGENCE	COLLECTIVE	CORNEA
CARNIVORE	DENTITION	HOMEOTHERMIC
POUCH	VIRUS	HIBERNATION
VOCAL CORDS	VERTEBRATE	RABIES
REASON	INSTINCT	TASTE BUDS
POIKILOOTHERMIC	PRE-HISTORIC	HERBIVORE
ENDANGERED	CARRION	ANNELID
PARASITE	EMOTIONS	SPAWN
WARM-BLOODED	COLOR BLIND	PSYCHIATRIST
COMMUNICATION	PLASMA	SWEATING
MIGRATION	DISEASE	DOMESTICATION
PELVIS	INVERTEBRATE	
PALATE	LEARNING	

QUESTIONS FOR THOUGHT, DISCUSSION AND FURTHER STUDY

1. Protozoans can be classified as to how they "get around". Draw a sketch of an ameba, paramecium, and euglena and label the "locomotive" device for each.
2. Many organisms that cause disease are transferred to man by insect vectors. Research and find out the insect vector for Malaria, Sleeping Sickness, Yellow Fever, Rocky Mountain Spotted Fever, and Bubonic Plague.
3. Why must Louis Pasteur, the famous French Microbiologist, be brought into any discussion about rabies?
4. What is the basic difference between a vertebrate and invertebrate?
5. Can you think of a more important function of "tasting" in animals such as fish, some insects, and reptiles?
6. How do you communicate with words? How do animals communicate without even sounds?
7. Most animals know their language by instinct, but birds do not. Explain.
8. Try to name all the separate parts and organs that we must use to produce speech.
9. How does man use tears differently from other animals?
10. Can you differentiate between trial and error learning and reasoning?
11. After listening to this program, try to explain how animal oddities may have evolved, (e.i., the armadillo).
12. Explain very simply the difference between warm and cold blooded animals. Describe how a warm blooded animal must cool itself.
13. Describe what happens in the body of a hibernating animal.
14. How does the purpose of migration differ in salmon and buffalo?
15. How does the reptile egg differ from an amphibian egg?
16. What is meant by the phrase "Domestication of animals"? Give several examples.
17. Of what significance is an opposite thumb?
18. Can you tell the origins of a few animal names?
19. What would our collective dentition tell a scientist from another planet about our diet?
20. Is a silkworm a worm? Why or why not?
21. What characteristics make the platypus and echidma monotremes?
22. Describe several unusual animal adaptations for survival. (ex. anteater, jackrabbits).

CAREER OPPORTUNITIES

LAB-TECHNICIAN	MICROBIOLOGIST
PSYCHOLOGIST	PSYCHIATRIC ORDERLY
MENTAL HEALTH COUNSELOR	ZOOLOGIST
VIROLOGIST	EPIDEMIOLOGIST
ANIMAL BEHAVIORIST	PSYCHIATRIC NURSE
PSYCHIATRIST	ZOOKEEPER