

# 2009 4-H MARINE ECOLOGY EVENT

## SECTION 5: MULTIPLE CHOICE STUDY QUESTIONS

### JUNIOR LEVEL (8-10 years old)

#### MARINE PLANTS

1. Which is NOT true about seaweeds?
  - a. They lack real roots, stems, or leaves
  - b. All seaweeds are single celled organisms
  - c. There are brown, red, and green types
  - d. They provide food for many types of marine animals
2. Sargassum weed is a type of \_\_\_\_\_.
  - a. tree
  - b. flower
  - c. brown seaweed
  - d. green seaweed
3. Some seaweeds are attached to the ocean floor by a \_\_\_\_\_.
  - a. holdfast
  - b. stem
  - c. root
  - d. special glue
4. A mangrove that has prop-like roots is the \_\_\_\_\_.
  - a. black mangrove
  - b. red mangrove
  - c. white mangrove
  - d. buttonwood
5. Phytoplankton are \_\_\_\_\_.
  - a. microscopic ocean plants
  - b. plants on the seashore
  - c. small floating sand grains
  - d. marine animals that are good swimmers

## MARINE ANIMALS

6. Which is NOT true about a sponge?
- It has lungs like we do
  - Its body is full of holes
  - It grows on the seafloor
  - It can provide a home for many small sea animals
7. A jellyfish can sting you with its \_\_\_\_\_.
- umbrella
  - tentacle(s)
  - fin
  - arms
8. A polyp is a \_\_\_\_\_.
- coral animal
  - jellyfish
  - young sponge
  - type of fish
9. A sea anemone \_\_\_\_\_.
- is an animal
  - has a mouth surrounded by tentacles
  - has stinging cells
  - all of the above
10. Which group of animals below are ALL mollusks?
- sea star, sea urchin, marine worm
  - conch, sea slug, and clam
  - crab, shrimp, lobster
  - fish, manatee, bird
11. Which of the following is NOT true of an octopus?
- It can change colors depending on its "mood."
  - It has scales like a fish.
  - It is quite intelligent and can be trained to do tricks.
  - It has suction cups on its "arms."

12. Which group of animals are ALL echinoderms?
- stingray, shark, moray eel
  - clam, conch, shrimp
  - sea urchin, starfish, sea cucumber
  - seasquirt, sponge, brain coral
13. Which of the following is NOT true about a starfish?
- It uses suction cup-like feet to help it move.
  - It has bumpy or spiny skin.
  - It has tentacles that can sting you.
  - It lives on the seafloor.
14. Which group of animals are ALL arthropods?
- sponge, worm, sea squirt
  - coral, jellyfish, sea squirt
  - bird, fish, alligator
  - shrimp, crab, lobster
15. Which of the following is NOT true about crabs?
- They have legs that can bend
  - They have shells for protection
  - They have teeth like us
  - They have eyes
16. A crab that many people in Florida like to eat is called the \_\_\_\_\_.
- fiddler crab
  - lobster
  - blue crab
  - mole crab
17. Which of the following is TRUE about the horseshoe crab?
- It is not a true crab but more related to a spider.
  - It can sting you with its tail.
  - It can grow as big as 5 feet.
  - It can swim like a fish.
18. When a crab sheds its shell it will \_\_\_\_\_.
- grow a new one
  - go hide the rest of its life
  - steal a shell from another crab
  - change and become another type of crab

19. Barnacles can be found \_\_\_\_\_.
- a. swimming around coral reefs
  - b. attached to rocks in the intertidal zone
  - c. living in the sand on sandy beaches
  - d. in fresh water lakes
20. Which of the following is TRUE about sharks?
- a. Their body is made of cartilage instead of bone
  - b. They have smooth skin without scales
  - c. They are all herbivores
  - d. Their jaws have one row of teeth
21. A fish's tail is called the \_\_\_\_\_ fin.
- a. anal fin
  - b. pectoral
  - c. caudal
  - d. pelvic
22. Fish can sense vibrations or movements in the water with their \_\_\_\_\_.
- a. lateral line
  - b. scale
  - c. ear
  - d. air bladder
23. Which of the following is NOT true about a bony fish?
- a. they have lungs
  - b. they have a swim bladder
  - c. they have bony skeleton
  - d. they have gills
24. Which group of fish DO NOT live along Florida's coast?
- a. tuna and swordfish
  - b. halibut and salmon
  - c. seatrout and redfish
  - d. mullet and grouper
25. The largest grouper found off the coast of Florida is the \_\_\_\_\_.
- a. red grouper
  - b. goliath grouper
  - c. yellowfin grouper
  - d. gag grouper

26. Baby sea turtles \_\_\_\_\_.
- a. hatch from eggs buried on a sandy beach
  - b. head to the ocean after they hatch
  - c. can be eaten by birds on the beach
  - d. all of the above are true
27. Sea turtles eggs are shaped like \_\_\_\_\_.
- a. chicken eggs
  - b. soft ping-pong balls
  - c. small fish eggs
  - d. an ostrich egg
28. Which sea turtle can grow to be the largest in size?
- a. Kemp's Ridley sea turtle
  - b. loggerhead sea turtle
  - c. leatherback sea turtle
  - d. green turtle sea turtle
29. Which bird dives in the water head first and uses its big "pouch" to capture food?
- a. pelican
  - b. eagle
  - c. egret
  - d. sea gull
30. Cormorants often hold their wings out to their side. Why?
- a. They need to dry their feathers.
  - b. They want to look larger and scare away predators.
  - c. They are getting ready to take off and fly away.
  - d. They are trying to attract a mate.
31. Which bird uses its sharp talons to catch and hold its food?
- a. pelican
  - b. sea gull
  - c. osprey
  - d. egret
32. What small whale is common off the Florida coast?
- a. killer whale
  - b. blue whale
  - c. dolphin
  - d. manatee

33. Manatees are \_\_\_\_\_.
- a. carnivores
  - b. omnivores
  - c. herbivores
  - d. scavengers

### **MARINE HABITATS/ECOSYSTEMS**

34. Which is NOT true about plankton?
- a. They are small floating animals and plants.
  - b. They are carried by ocean currents to other places.
  - c. They are food for many marine animals.
  - d. They are good swimmers.
35. Which of the following is an example of zooplankton?
- a. copepod
  - b. shark
  - c. diatom
  - d. seaweed
36. Which is NOT true about an estuary?
- a. It is a place where fresh water (from a river) mixes with saltwater
  - b. It is found in the deep sea
  - c. It is often high in biodiversity
  - d. The water is often brackish
37. Brackish water is \_\_\_\_\_.
- a. saltwater and freshwater that are mixed together
  - b. saltwater that is very high in salt
  - c. polluted saltwater
  - d. polluted freshwater
38. Dead plants and animals in the water decompose and become \_\_\_\_\_.
- a. dirt
  - b. sand
  - c. detritus
  - d. mush

39. Which of the following is NOT true about a sandy beach in Florida?
- a. Many beach animals must bury in the sand to escape from predators
  - b. It is a great place to see many shore birds
  - c. There are lots of hiding places for animals
  - d. It is a fun place to go beachcombing
40. A sea bird that uses its large throat pouch to scoop up fish when it dives head first into the water is the:
- a. pelican
  - b. ring-billed gull
  - c. heron
  - d. eagle
41. Salt marshes \_\_\_\_\_.
- a. provide a nursery area for the young of many animals.
  - b. help protect land by absorbing wave action/high water from bad storms.
  - c. help to filter and clean water before it enters the ocean.
  - d. all of the above are true of salt marshes
42. Which type of mangrove is usually found closest to the water?
- a. red mangrove
  - b. black mangrove
  - c. white mangrove
  - d. buttonwood
43. Mangroves provide \_\_\_\_\_.
- a. hiding places for young fish
  - b. nesting areas for egrets and herons
  - c. a buffer against high winds and waves
  - d. all of the above are true of mangroves
44. Most plants in a salt marsh will be \_\_\_\_\_.
- a. trees and shrubs
  - b. grasses and rushes
  - c. sea weed and sea grasses
  - d. red algae
45. Which of the following is NOT a type of sea grass?
- a. manatee grass
  - b. turtle grass
  - c. St. Augustine grass
  - d. shoal grass

46. A food chain always begins with a
- a. carnivore
  - b. producer
  - c. omnivore
  - d. herbivore
47. A benthic animal is one that \_\_\_\_\_.
- a. swims near the surface
  - b. floats near the surface
  - c. lives on the bottom of the ocean
  - d. lives on a beach above high tide
48. Which of the following is an example of a nektonic animal?
- a. white shark
  - b. crab
  - c. sponge
  - d. sea gull
49. An animal that eats both plants and animals in its diet is called a \_\_\_\_\_.
- a. carnivore
  - b. herbivore
  - c. omnivore
  - d. producer
50. A whale uses \_\_\_\_\_ to find other objects in the water.
- a. echolocation
  - b. its ears
  - c. its eyes
  - d. its lateral line