General Pre-Activities

Grades: K-5

1. Have your students draw a picture or create a mural of a marine ecosystem on a large piece of butcher paper, including as many animal species as they can come up with relating to the marine environment.
2. Make an "experience list." On a large piece of butcher paper, record students' thoughts about their upcoming trip to the ASLC. Record what they think might be true or what they have heard. Also, make a list of things they would like to find out and take it with you to the Center.
3. Create name tags in the shape of sea animals. These can be worn around the neck with string. Chaperoned groups can be organized by the animals on their name tags.
4. Review the following vocabulary words with your students:
   adaptation: a special feature or characteristic that living things have which helps them to survive in their environment.
   camouflage: a behavior, shape, color or color pattern that helps a plant or animal blend in with its surroundings.
   ecosystem: a community of organisms interacting with each other, plus the environment in which they live and with which they interact. An ecosystem includes nonliving components (minerals, soil, etc.), living components and the climate.
   habitat: the surroundings in which an animal lives, where all its needs for life are found.
   invertebrate: an animal without a backbone.
   marine mammal: a mammal adapted to live in the marine environment and dependent on the ocean for food.
   mammal: any of a large class Mammalia. They share five characteristics: warm-blooded, give live birth, nurse their young, breathe air and have hair.
   ocean: the great body of salt water that covers approximately 71% of the surface of the earth.
   prey: an animal that is killed and eaten by a predator.
   predator: an animal that kills and eats other animals.
   vertebrate: a group of animals that have a segmented spinal

column. Mammals, fishes, birds, reptiles and amphibians are vertebrates. A member of the subphylum Vertebrata.

5. Make marine plant and animal cards using cut-outs from magazines or drawings to familiarize students with plants and animals they might see at the ASLC. Have your students play concentration, use them as flash cards or develop other activities.

Grades: 6-9

1. Make an "experience list." On a large piece of butcher paper, record students' thoughts about their upcoming trip to the ASLC. Record what they think might be true or what they have heard. Also, make a list of things they would like to find out and take it with you to the Center.
2. Have your students draw a picture or create a mural of a marine ecosystem on a large piece of butcher paper including as many animal species as they can come up with relating to the marine environment.
3. Have each student choose one animal that "lives" at the ASLC. Using books from the school library create a short informative report, including the animals' habitat and special adaptations.
4. Review the following vocabulary words with your students:
   adaptation: a special feature or characteristic that living things have which helps them to survive in their environment.
   camouflage: a behavior, shape, color or color pattern that helps a plant or animal blend in with its surroundings.
   ecosystem: a community of organisms interacting with each other, plus the environment in which they live and with which they interact. An ecosystem includes nonliving components (minerals, soil, etc.), living components and the climate.
   endangered species: a species that is in danger of becoming extinct.
   extinction: a species no longer found alive on the earth.
   food chain: a sequence in which organisms eat and are eaten, in a transfer of energy along the chain.
   food web: interconnected food chains.
   habitat: the surroundings in which an animal lives, where all its needs for life are found.
   invertebrate: an animal without a backbone.

mammal: any of a large class Mammalia. They share five characteristics: warm-blooded, give live birth, nurse their young, breathe air and have hair.
marine mammal: a mammal adapted to live in the marine environment and dependent on the ocean for food.
marine: of the sea or ocean.
ocean: the great body of salt water that covers approximately 71% of the surface of the earth.
organism: a living thing, such as a plant or animal.
prey: an animal that is killed and eaten by a predator.
predator: an animal that kills and eats other animals.
research: careful, systematic, patient study and investigation in some field of knowledge, undertaken to discover or establish facts or principles.
scientific method: Science is a process by which experimentation is used to answer questions. This process of experimentation is called the scientific method and involves several steps:
Observation: Scientists are generally curious about their surroundings. This curiosity leads them to ask questions:
Hypothesis: As scientists formulate questions, they naturally try to answer those questions. Those attempts to answer questions lead to hypothesis, or educated guesses, regarding the question's' answer. **Testing**: Of all the steps in the scientific method, the one that truly separates science from other disciplines is the process of experimentation. In order to prove, or disprove, a hypothesis, a scientist will design an experiment to test the theory. An important aspect of scientific experimentation is repeatability. In other words, if two different people in two different parts of the world perform the same experiment, they should both get the same results.
terrestrial: of or pertaining to the land.
threatened: likely to become endangered.
vertebrate: a group of animals that have a segmented spinal column. Mammals, fishes, birds, reptiles and amphibians are vertebrates. A member of the subphylum Vertebrata.

5. Have your students list the characteristics of a mammal. What are some examples of mammals? Have them research how marine mammals, such as the gray whale, Harbor seal or Steller sea lion,

are like or unlike other animals. Compare the living conditions of a marine mammal with those of a terrestrial mammal. How do marine animals sleep? How do they eat? How do they get food? What kind of environmental conditions must they be adapted to?