

Shark Species Profiles

Background:

Sharks have existed for about 400 million years, before dinosaurs roamed the earth! They belong to a class of fish called Chondrichthyes. Chondrichthyes means "cartilaginous fishes". The skeletons of sharks and other Chondrichthyans are made of cartilage unlike human skeletons that are made of bone. Although all sharks have some similarities such as having gills and fins, they come in a variety of shapes, sizes, colors, and personalities. They also live in many different habitats and in different parts of the world.

Materials:

There are 8 shark species profiles included in this activity with information on size, color, diet, and habitat of each shark. Focus is on sharks that live in waters off the Florida coast although sharks from other parts of the world are also included:

1. Bull shark
2. White shark
3. Tiger shark
4. Great hammerhead shark
5. Shortfin mako shark
6. Thresher shark
7. Whale shark
8. Leopard shark

In addition, there are also species profiles on closely related rays, skates, and sawfish that may also be included in classroom learning activities:

1. Atlantic stingray
2. Clearnose skate
3. Smalltooth sawfish

Information on size, color, diet, habitat, and geographical location is included in each species profile as well as a photo and a distribution map.

Classroom Activities:

- Graph the maximum length of each species to determine which species is the largest and which is the smallest and how they compare to the size of humans
- Make a shark mobile with cut outs using the provided patterns and instructions, using shark species profiles for guidelines on the coloration of each shark.
- Color in coloring pages of sharks using the description of each shark species as a guide



Bull Shark
Carcharhinus leucas



Length: Maximum length of 11.5 feet (3.5 meters)

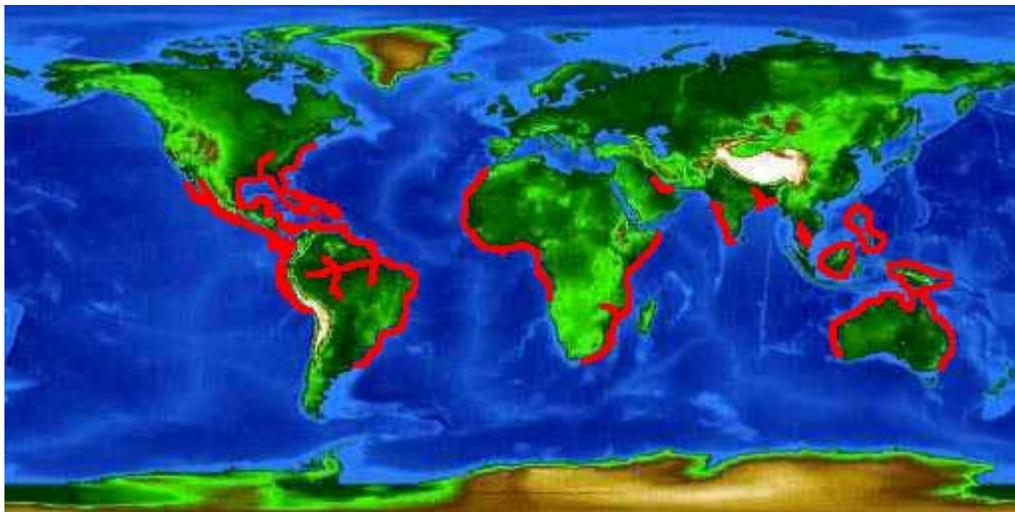
Color: Pale to dark gray above fading to a pale or white underside

Diet: Fish and small sharks

Habitat: Marine and freshwater shallow habitats

Geographical

Location: Live throughout the world



White Shark

Carcharodon carcharias



Length: Maximum length of 22.3 feet (6.8 meters)

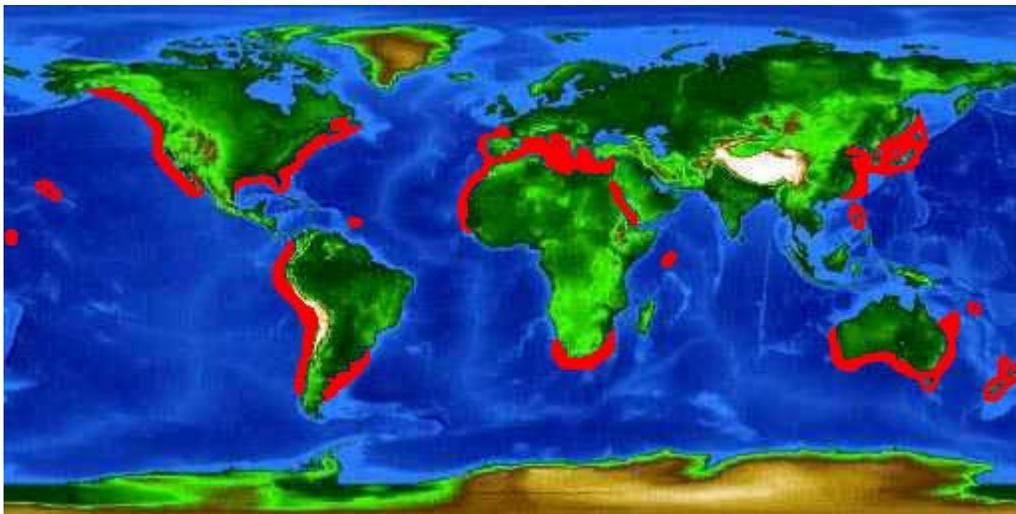
Color: Blue-gray to gray-brown on top with a white underside, sometimes there are small spots long the sides of the shark and a black blotch near the pectoral fin

Diet: Marine mammals such as seals, sea lions, and dolphins as well as fish and sometimes sea turtles

Habitat: Marine, waters ranging from shallow water to depths of 775 feet (250 meters)

Geographical Location:

Temperate waters throughout the world



Tiger Shark

Galeocerdo cuvier



Length: Maximum length of 14 feet (4.25 meters)

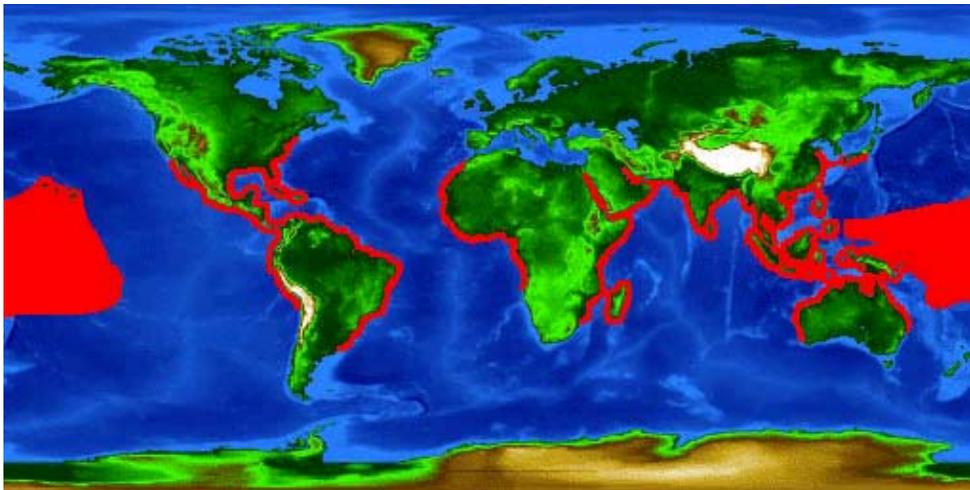
Color: Bluish-gray to dark gray or black on top with a yellowish-white underside, dark spots are visible on young sharks but fade as the shark matures

Diet: Sea turtles, rays, sharks, bony fishes, sea birds, dolphins, squid, and crustaceans

Habitat: Marine, murky waters off the coast from the surface to depths of 1,085 feet (350 meters)

Geographical Location:

Temperate and tropical waters throughout the world, with the exception of the Mediterranean Sea



Great Hammerhead Shark

Sphyrna mokarran



Length: Maximum length of 20 feet (6.1 meters)

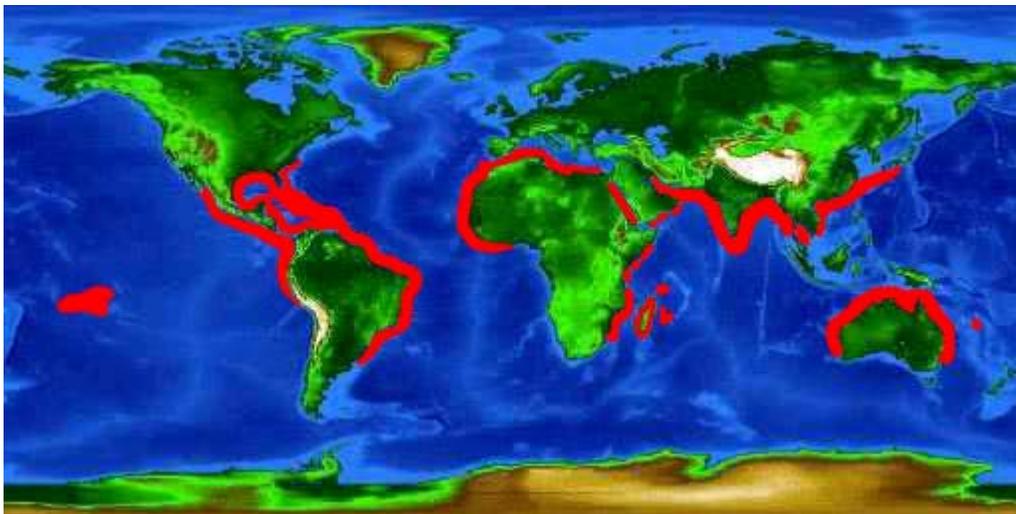
Color: Dark brown to light grey or even olive color on top, fading to white on the underside

Diet: Invertebrates, bony fish, and rays as well as other sharks

Habitat: Marine, shallow coastal waters to offshore water depths of 985 feet (300 meters)

Geographical Location:

Warm temperate and tropical marine waters throughout the world



Shortfin Mako

Isurus oxyrinchus



Length: Maximum length of 13 feet (4 meters)

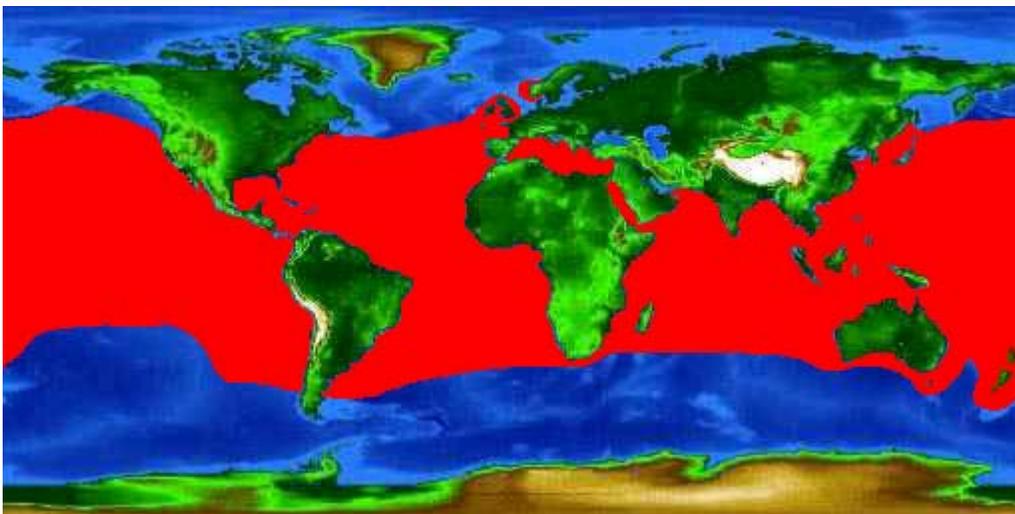
Color: Brilliant metallic blue on top and white underside

Diet: Fast moving swordfish, tuna, and other sharks as well as squid (the mako is the fastest shark – it can swim 20 mph!)

Habitat: Marine, open ocean waters to depths of 2,425 feet (740 meters)

Geographical Location:

Tropical and temperate waters throughout the world's oceans



Thresher Shark

Alopias vulpinus



Length: Maximum length of 24.9 feet (7.6 meters) including the long tail fin

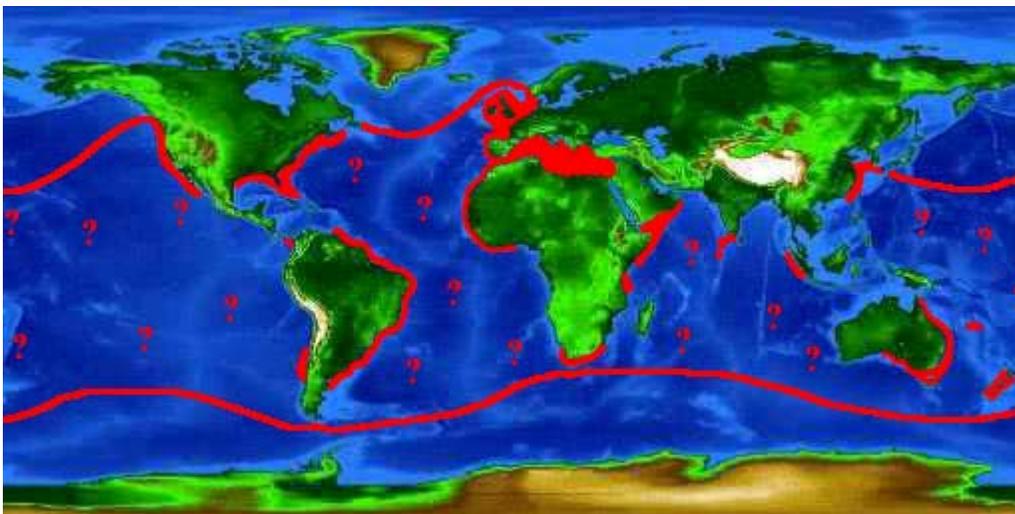
Color: Dark brown and slate gray to black on top with black spots near the tail, it is white underneath

Diet: Small bony fish such as herring, bluefish, and mackerel, they use their long tail fin to stun their prey so it is easier to catch

Habitat: Marine, coastal waters to open ocean waters at depths to 1,800 feet (550 meters)

Geographical Location:

Cold temperate and tropical waters throughout the world's oceans



Whale Shark

Rhincodon typus



Length: Maximum length of 60 feet (18 meters) – largest living fish!

Color: Greyish, bluish or brownish above with an upper surface pattern of creamy white spots between pale, vertical and horizontal stripes, the underside is white

Diet: Plankton (microscopic plants and animals) and small schooling fish

Habitat: Marine, open oceans

Geographical Location:

Warm temperate and tropical waters throughout the world's oceans

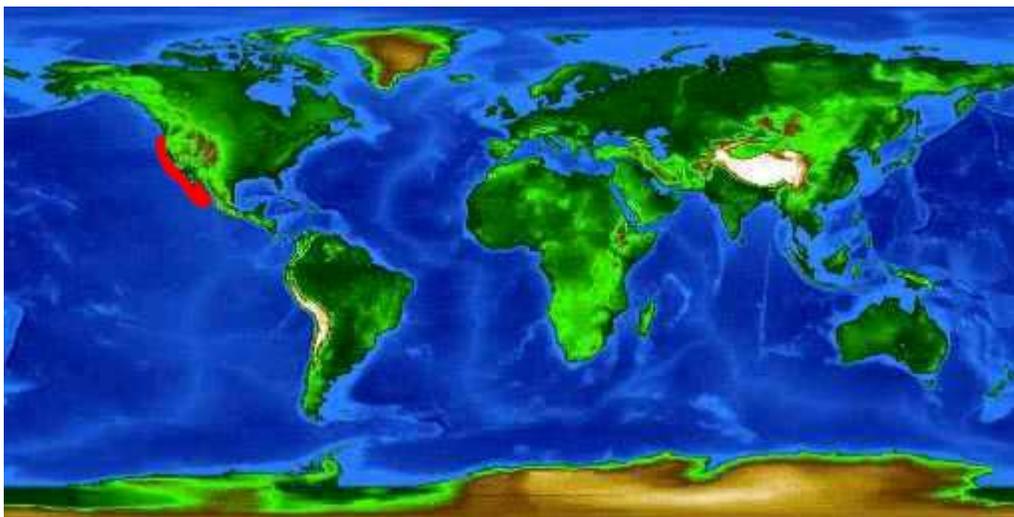


Leopard Shark

Triakis semifasciata



- Length:** Maximum length of 7 feet (2.1 meters)
- Color:** Silver to bronzy gray with dark saddles and spots, lighter underside
- Diet:** Small fish, crabs, shrimp, worms, and fish eggs
- Habitat:** Marine, sandy and muddy bays in shallow water less than 20 feet (6 meters) in depth
- Geographical Location:**
Eastern Pacific Ocean from Oregon to the Gulf of California



Atlantic Stingray

Dasyatis sabina



Length: Disk width of 12-15 inches (stingrays are measured this way)

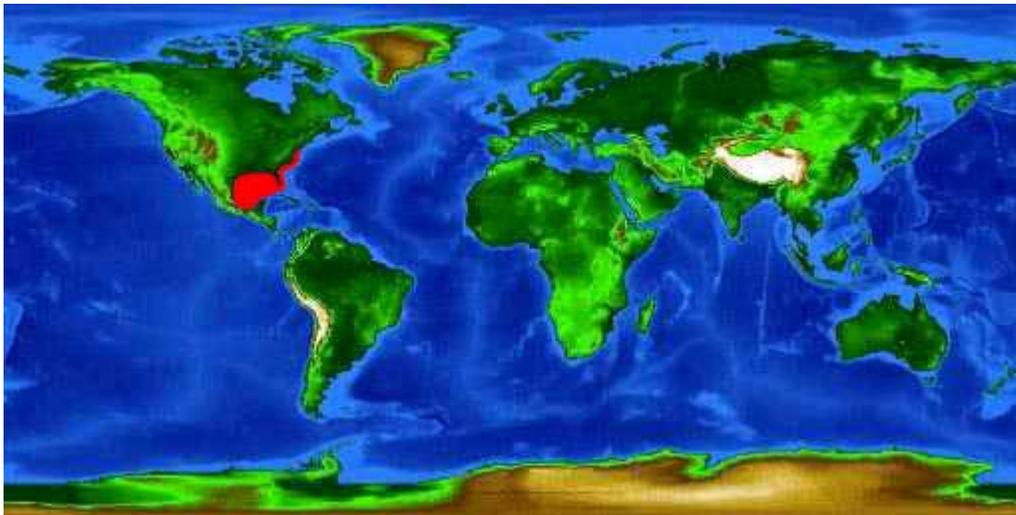
Color: Brown or yellowish brown on the top, becoming lighter close to the edge. The underside is white or light gray

Diet: Clams, worms, tube anemones, and bivalves

Habitat: Marine and brackish water in warm coastal areas, it also lives in some freshwater lakes in Florida

Geographical Location:

Western Atlantic Ocean from Chesapeake Bay south to Florida and into the Gulf of Mexico



Clearnose Skate

Raja eglanteria



Length: Maximum disk width of 19 inches (48 cm)

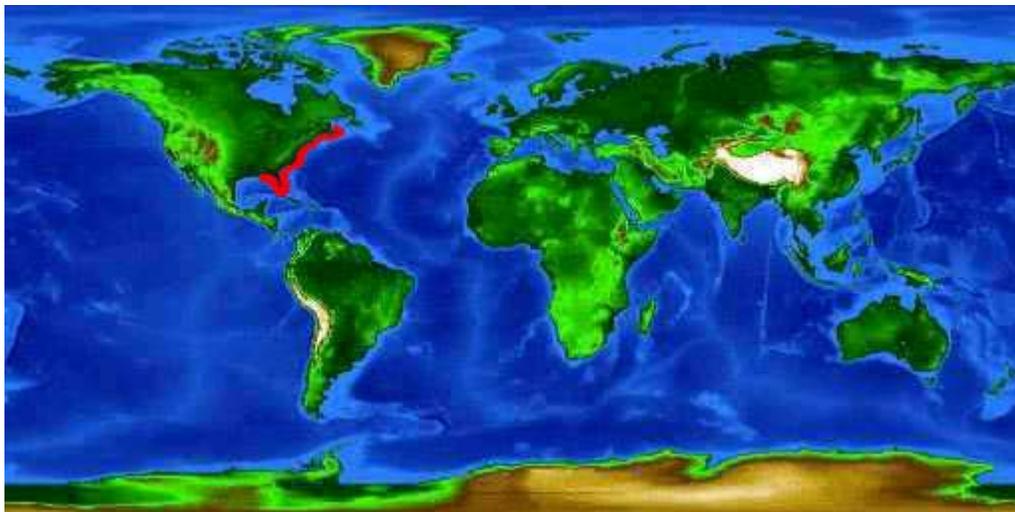
Color: Dark to light brown or gray on the dorsal surface with dark spots and bars sometimes present, the ventral surface is white

Diet: Shrimp, crabs, and small fish

Habitat: Marine inshore waters

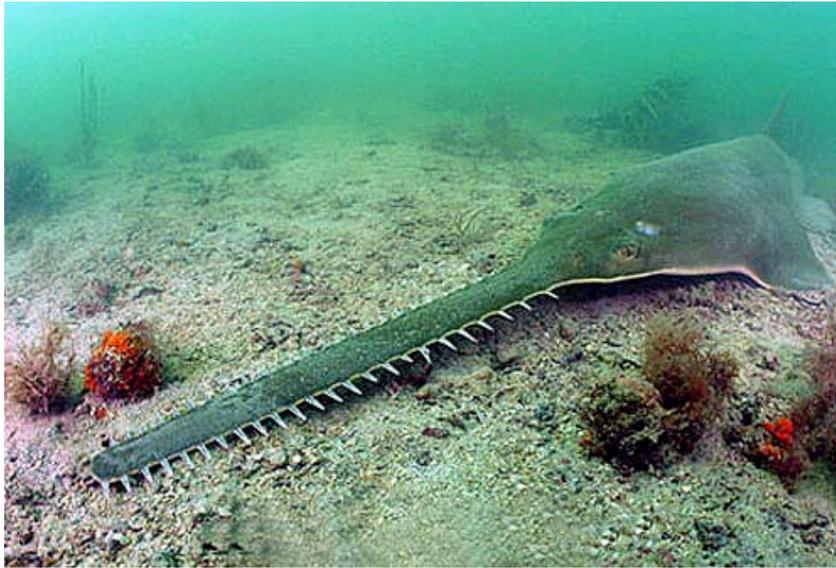
Geographical Location:

Atlantic Ocean – from Massachusetts south through Florida and into the Gulf of Mexico



Smalltooth Sawfish

Pristis pectinata



Length: Maximum length of 24.7 feet (7.6 m)

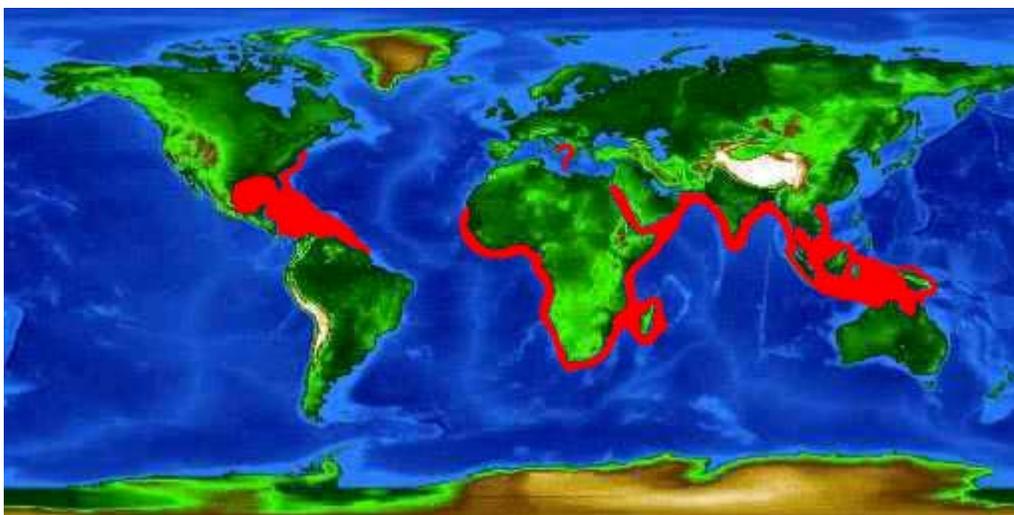
Color: Brownish to bluish gray body with a white underside

Diet: Marine invertebrates that live in the sand, small fishes

Habitat: Marine coastal areas such as estuaries, bays, lagoons and even into freshwater rivers occasionally

Geographical Location:

Live throughout the world in the tropics, in the western Atlantic Ocean. they are found from New York south to Brazil including the Gulf of Mexico and Caribbean Sea.



Shark Species Profiles : Graphing and Question/Answer Activity Sheet

SHARK	LENGTH	GRAPH												
Bull Shark	11.5 feet													
White Shark	22.3 feet													
Tiger Shark	14 feet													
Great Hammerhead Shark	20 feet													
Shortfin Mako Shark	13 feet													
Thresher Shark	24.9 feet													
Whale Shark	65.5 feet													
Leopard Shark	7 feet													
Smalltooth Sawfish	24.7 feet													
Human Adult	6 feet													
Human Child	4 feet													
LENGTH (feet)		5	10	15	20	25	30	35	40	45	50	55	60	65

Instructions: Each box represents five feet in length. Color in the boxes from left to right until you reach the appropriate box representing the length of the shark on that line. Use your graph to answer the questions below:

1. Which shark is the shortest?
2. Which shark is the longest?
3. Does the size of a shark indicate how dangerous it is?