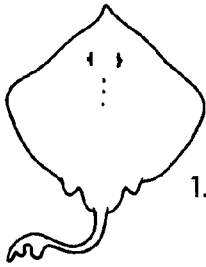
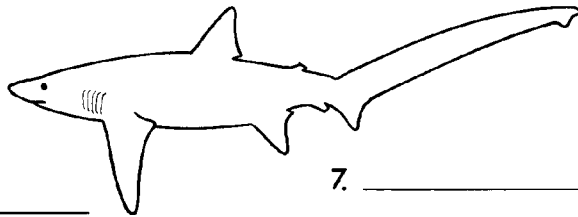


Name that Fish

Use the "Key to Families" to help you identify the family of each shark or batoid on this page.



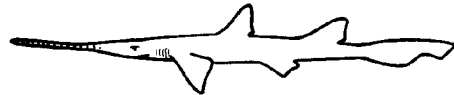
1. _____



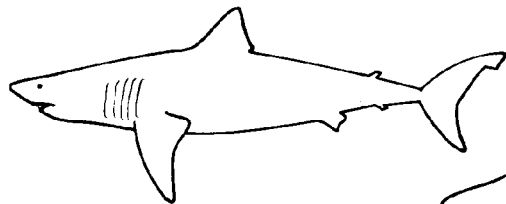
7. _____



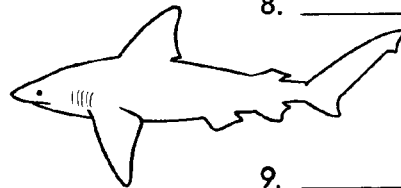
2. _____



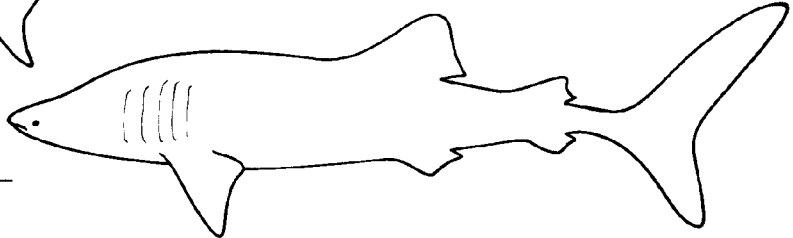
8. _____



3. _____



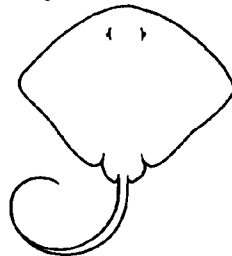
9. _____



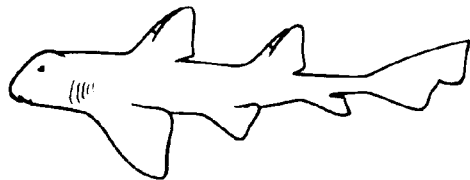
10. _____



4. _____



11. _____



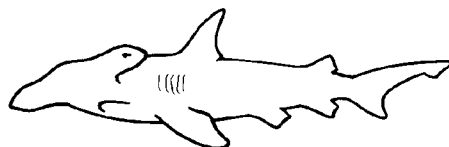
5. _____



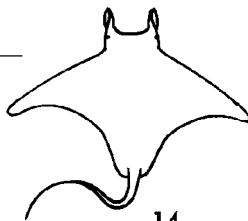
12. _____



6. _____



13. _____



14. _____

Key to Families

1. A. body kitelike if viewed from the top..... go to 12
B. body not kitelike if viewed from the top..... go to 2
2. A. anal fin absent go to 11
B. anal fin present..... go to 3
3. A. six gill slits present..... Family Hexanchidae
B. five gill slits present go to 4
4. A. dorsal fin with spines Family Heterodontidae
B. no spines on dorsal fins go to 5
5. A. mouth at front of snout (rather than on
underside of head)..... Family Rhiniodontidae
B. mouth on underside of head..... go to 6
6. A. head expanded with eyes at ends of expansion Family Sphyrnidae
B. head not expanded go to 7
7. A. top half of caudal fin the same
size and shape as bottom half..... Family Lamnidae
B. top half of caudal fin different
in size and shape than bottom half go to 8
8. A. first dorsal fin very long, almost half
the total length of the body Family pseudotriakidae
B. first dorsal fin regular length..... go to 9
9. A. caudal fin very long, almost as long as entire body Family Alopiidae
B. caudal fin regular length go to 10
10. A. base of first dorsal fin behind pelvic fins Family Scyliorhinidae
B. base of first dorsal fin in front of pelvic fins Family Carcharhinidae
11. A. long point on the end of snout Family Pristiophoridae
B. snout without long point Family Squalidae
12. A. front of animal with two hornlike appendages Family Mobulidae
B. no hornlike appendages go to 13
13. A. small dorsal fin present near tip of tail Family Rajidae
B. no dorsal fin present near tip of tail..... Family Dasyatidae

It Makes Sense to Me

Sharks have remarkable senses that help them find food, avoid predators, and find mates.

No need to shout!

Do sharks have ears? Yes! You can't see a shark's ears, because they're deep inside the shark's head. But sharks can hear very well. In fact, sound is often the first thing that attracts a shark to its food. Sharks are attracted to low-frequency pulsed sounds, similar to those wounded animals might make. A shark can also sense vibrations through its lateral line, a sensory system just under a shark's skin that also detects water movement.

The better to see you with, my dear.

Sharks' eyes are well suited for seeing in dim light. They are particularly sensitive for seeing moving objects.

Something smells fishy....

Sharks are well known for their ability to smell even the tiniest amounts of blood in the water. Blood may lead a shark to an injured animal (and injured animals are easier to catch and eat than healthy ones).

Sharks do the "electric glide."

A series of tiny openings around a shark's head lead to small sacs that enclose nerve cells. These nerve cells detect weak electrical fields at short ranges. All living animals produce an electric field, and some bottom-dwelling sharks can detect animals living under the sand with their electroreceptors.

The Closer You Get. . .

OBJECTIVE: Given close-up photos of shark body parts and information about sharks, the student will be able to identify and describe the body parts and explain their function.

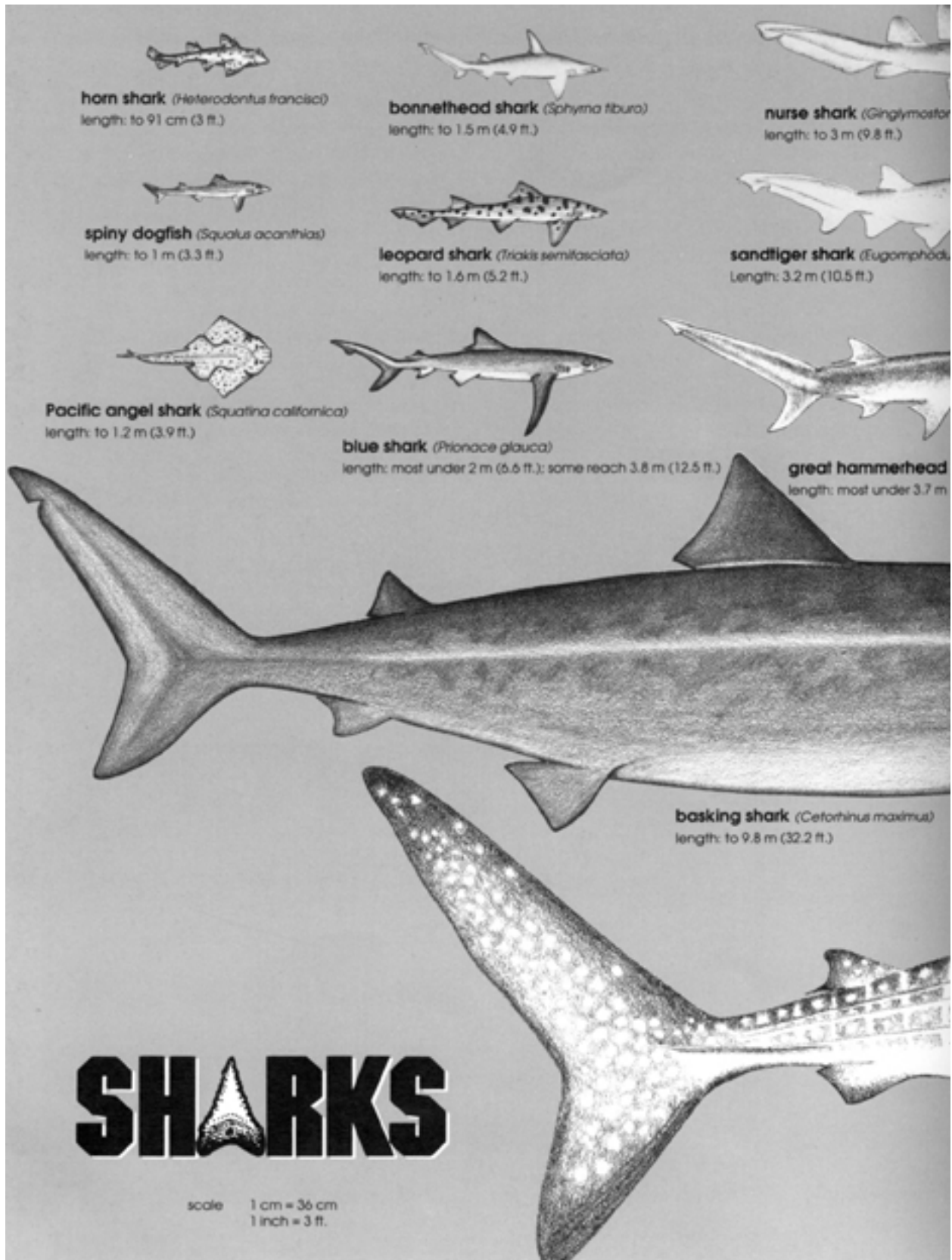
MATERIALS: "The Closer You Get. . ." funsheet (page 8 in this Guide), pencils and pens.

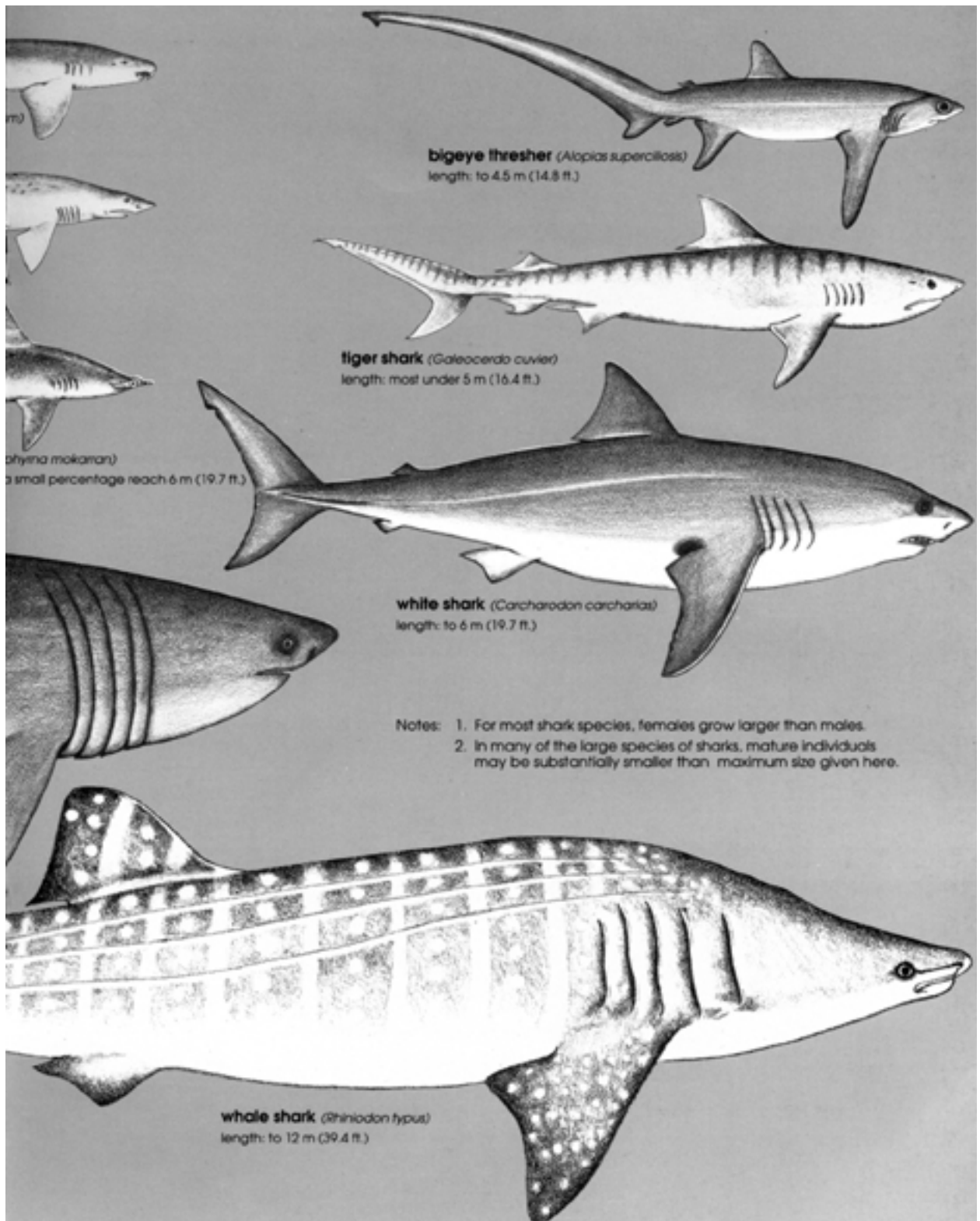
ACTION: Discuss shark senses and other adaptations as discussed in this Guide. Photocopy and distribute "The Closer You Get . . ." funsheet to students or groups of students. Students guess what each photo illustrates and write a sentence explaining what that body part does.

DEEPER DEPTHS: Working in groups, students look through old magazines for pictures of sharks. They cut out parts of photos and make their own funsheets for other groups of students to do. Have the students write out a hint that goes with each of their photos (example: this body part helps a shark swim fast).

ANSWER KEY

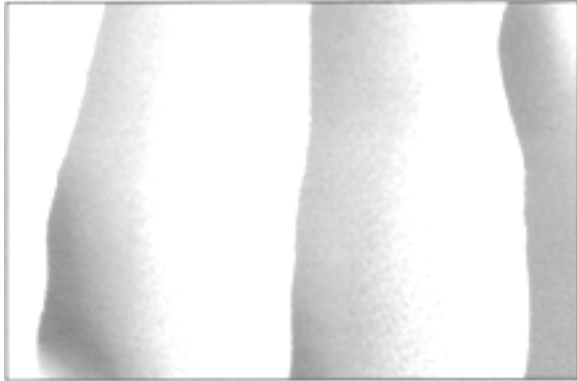
- | | |
|---------------|-------------------|
| 1. gill slits | 4. teeth |
| 2. scales | 5. nostril |
| 3. eye | 6. stingray spine |



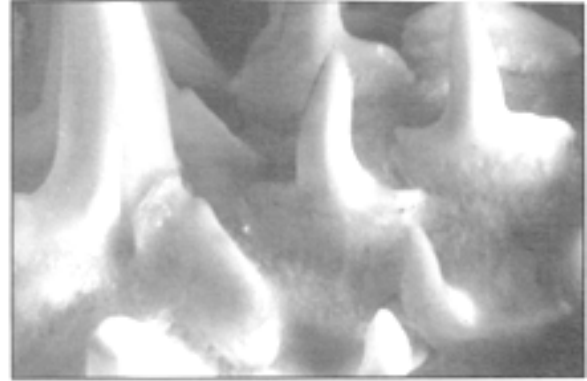


The Closer You Get...

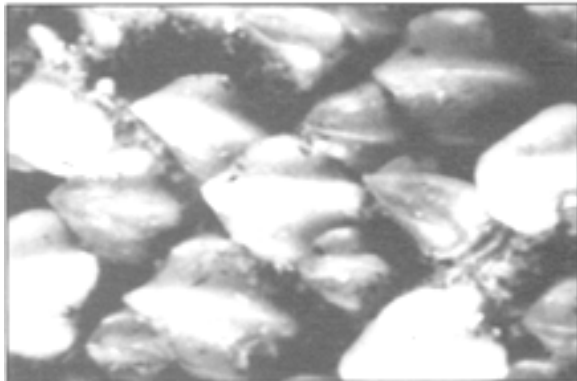
Can you identify the part of a shark or batoid in each of these photos? What does each body part do?



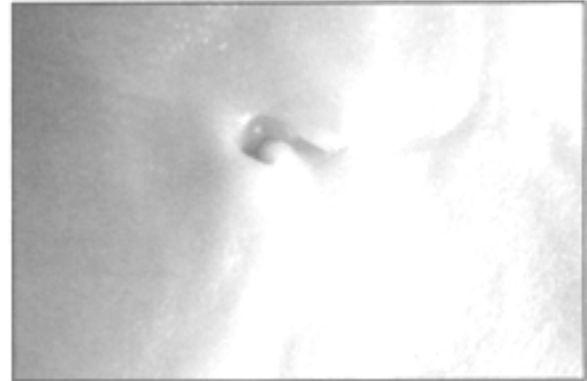
1. _____



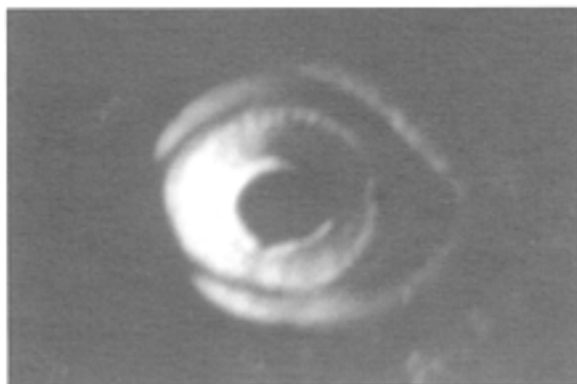
4. _____



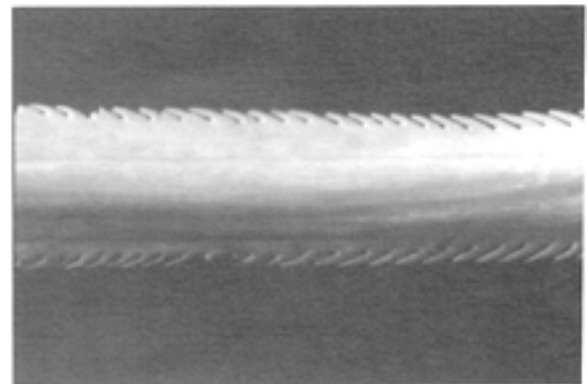
2. _____



5. _____



3. _____



6. _____