

Name \_\_\_\_\_ Date \_\_\_\_\_

## Shark Key

A classification system is a way of separating a large group of closely related organisms into smaller subgroups. With such a system, identification of an organism is easy. The scientific names of organisms are based on the classification system of living organisms. To classify an organism, scientists often use a key. A key is a listing of specific characteristics, such as structure and behavior, in such a way that an organism can be identified through a process of elimination.

This is called a dichotomous key.

In this investigation, it is expected that you:

1. Use a key to identify 14 shark families.
2. Study the method used in phrasing statements of a key.

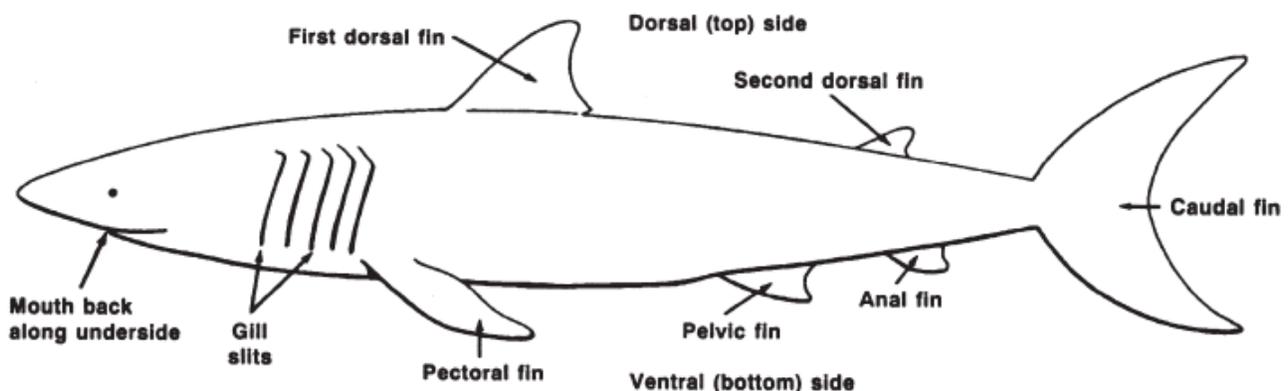
### Procedure

- Read sentences 1A and 1B of the key.
- Then look at shark 1 in Figure 2 for the characteristics mentioned in 1A and 1B.
- Follow the directions in these sentences and continue until you can name shark 1
- Continue this process for each shark until all the sharks are named.

### Example

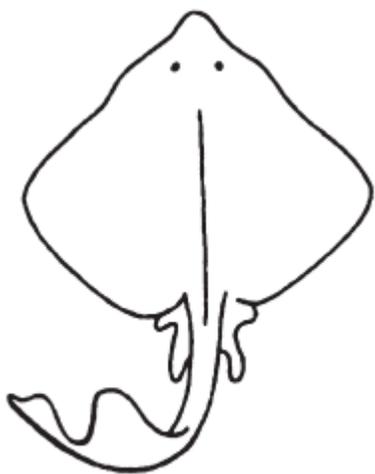
- If the shark has an anal fin and its *body is not kite shaped*, follow the directions of the key and *go directly to sentence 2*.
- If the shark lacks an anal fin or *has a kite shaped body*, then follow the directions of 1B and *go to sentence 10*.
  - Hint: Each answer choice should only be used once

Use the shark below to identify parts and locations on the shark's body.



## Shark Key

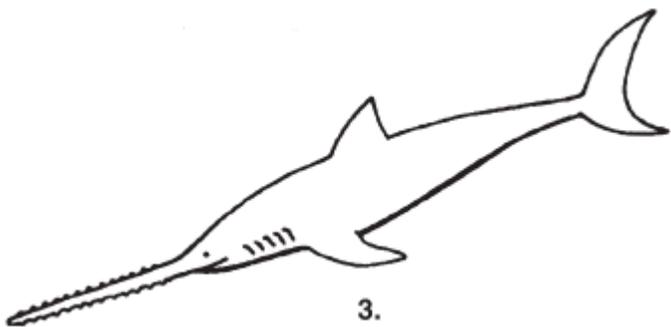
1. A. Body kite-like (if viewed from the top).....Go to 12  
B. Body not like kite (if viewed from the top)..... Go to 2
2. A. Pelvic fin absent.....Family Pristiophoridae  
B. Pelvic fin present.....Go to 3
3. A. Six gill slits present.....Family Hexanchidae  
B. Five gill slits present.....Go to 4
4. A. Only one dorsal fin.....Family Scyliorhinidae  
B. Two dorsal fins.....Go to 5
5. A. Mouth at front of snout rather than underside of head.....Family Rhinodontidae  
B. Mouth on underside of head.....Go to 6
6. A. Head expanded on side with eyes at end of expansion.....Family Sphyrnidae  
B. Head not expanded.....Go to 7
7. A. Top half of caudal fin exactly the same size and shape as bottom half.....Family Isuridae  
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 as long as entire body.....Family Pseudotriakidae  
B. First dorsal fin regular in 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. A long point on end of snout.....Family Scapanorhynchidae  
B. Snout without long point.....Go to 11
11. A. Anal fin absent.....Family Squalidae  
B. Anal fin present.....Family Carcharhinidae
12. A. Small dorsal fin present near tip of tail.....Family Rafidae  
B. No dorsal fin near tip of tail.....Go to 13
13. A. Front of animal with two hornlike appendages.....Family Mohulidae  
B. No hornlike appendages.....Family Dasyatidae



1.



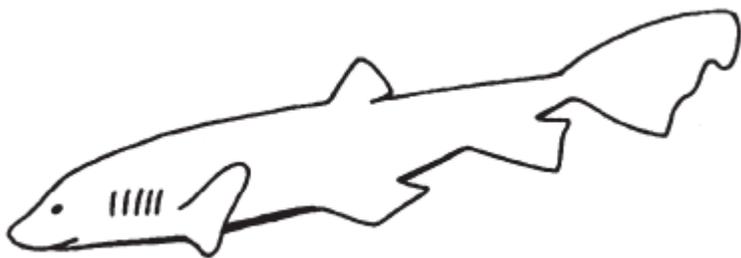
2.



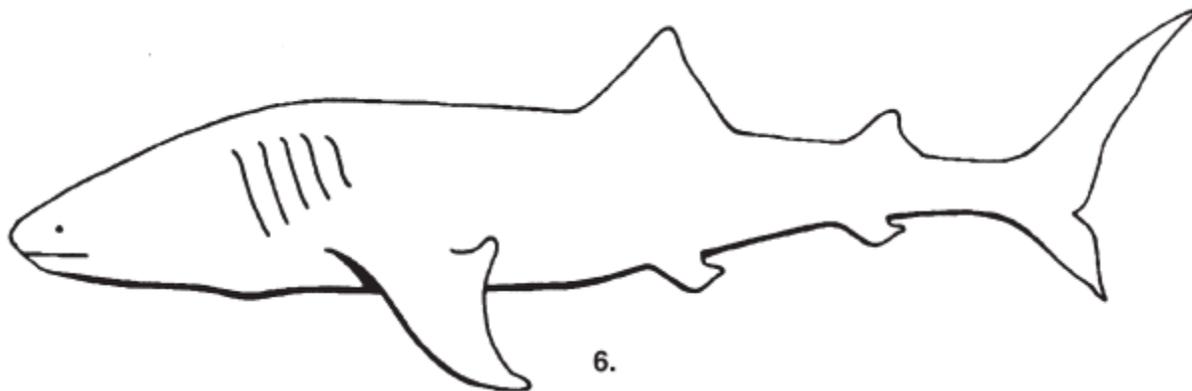
3.



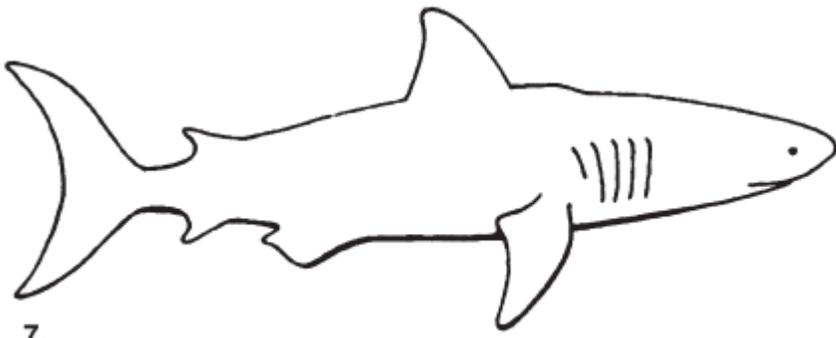
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5.



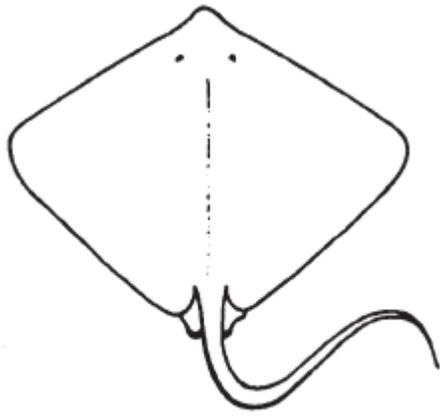
6.



7.



8.



9.



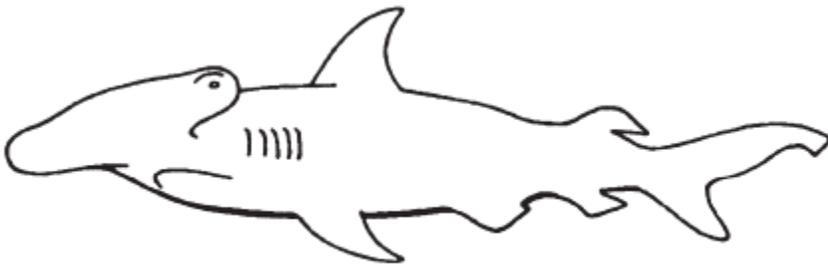
10.



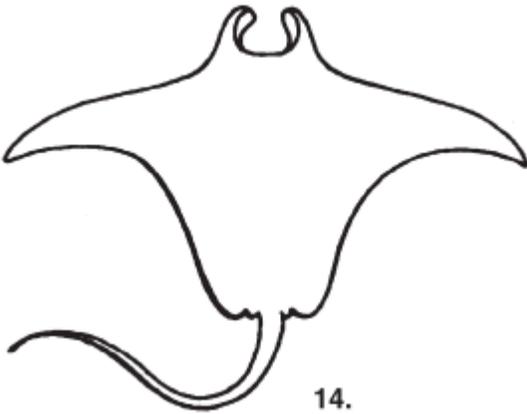
11.



12.



13.



14.