

Lab #2

Name: _____

Date: _____

Topic: Living Organisms

Aim: To identify the genus and species of some organisms with the use of a dichotomous key.

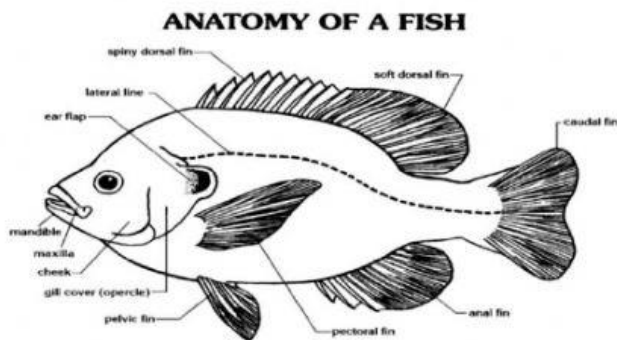
Skills being assessed: ORR

Materials:

- Pencil
- Dichotomous key
- Data table

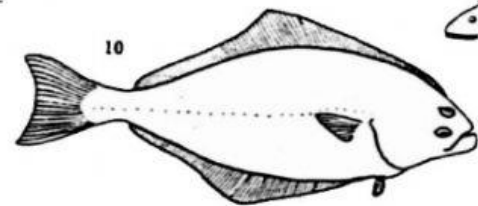
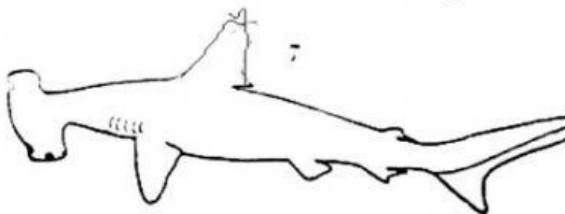
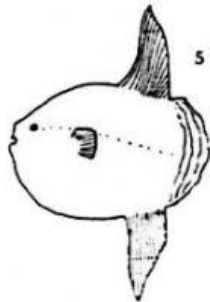
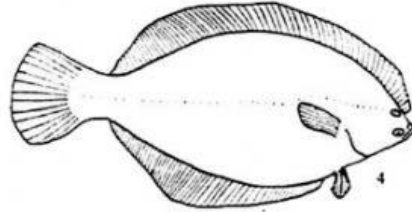
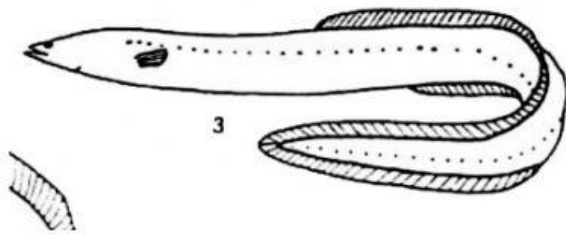
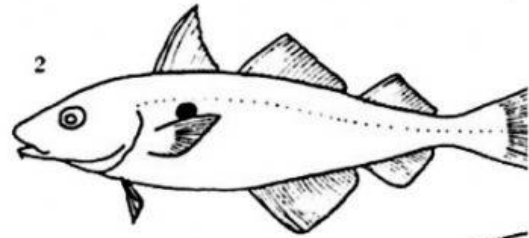
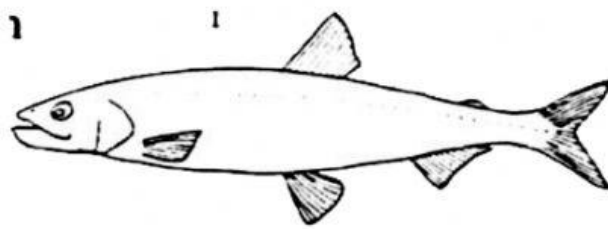
Procedure:

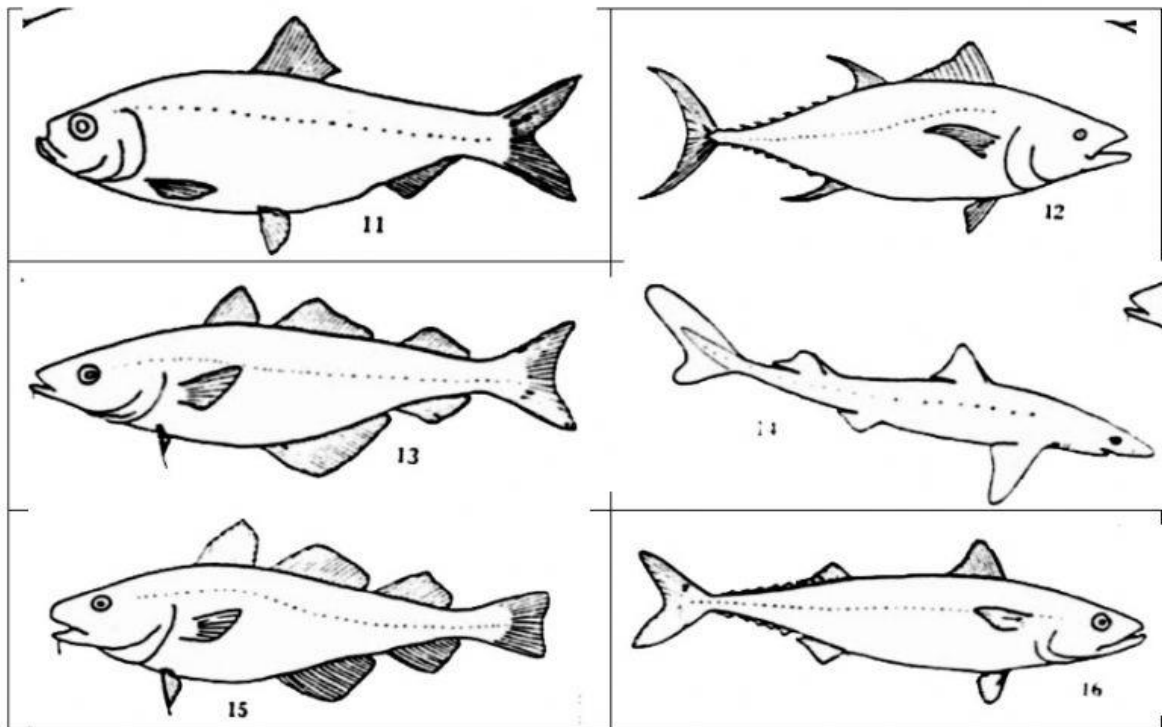
1. Use the image below as a guide to the parts of a fish's body that are used in the dichotomous key.



2. Read statements 1A and 1B of the key. They describe a fish characteristic that can be used to separate the fishes into two major groups.
3. Then study organism #1 in the image below for the characteristic referred to in 1A and 1B. Follow the directions until the name for fish 1 is determined.
4. For example, to key a fish that has a snake shaped body 1a and go directly to statement #2. Follow statement 2a where the fish has a beak-like mouth to identify the fish as an American eel.
5. Continue using the key, always starting back at Statement 1a and 1b for each shark until all have been identified. Record the family name for each fish in table form.

Diagrams of Fish to be identified:





Key to Fish Classification				
1	a the fish as a body like a snake	Go to #2		
	b the fish does not have a body like a snake	Go to #3		
2	a the fish has a beak-like mouth	-----	Anguilla rostrata	American Eel
	b the fish has a suction cup type mouth	-----	Petromyzon marinus	Lamprey
3	a The fish has eyes on the same side and a flattened body	Go to #4		
	b the fish does not have eyes on the same side and no flattened body	Go to #5		
4	a the fish has a forked tail	-----	Hippoglossus Stenolepis	Halibut
	b the fish does not have a forked tail	-----	Paralichthys Albogutta	Gulf flounder
5	a the fish has placoid scales	Go to #6		
	b the fish does not have placoid scales	Go to #7		
6	a the fish has a pointed head	-----	Squalus acanthias	Dogfish
	b the fish does not have a pointed head	-----	Sphyrna mokarran	Hammerhead shark

7	a the fish's body is full moon shaped with a little caudal fin	-----	Mola mola	Ocean sunfish
	b the fish's body is not distinctly moon shaped and has a highly visible larger caudal fin	Go to #8		
8	a the fish's body is club shaped like a baseball bat		Anarhichas lupus	Wolfish
	b the fish's body is not club shaped like a baseball bat	Go to # 9		
9	a there is evidence of a chin barbell	Go to #10		
	b there is no evidence of a chin barbell	Go to # 13		
10	a the caudal fin is not notched or only just barely notched	Go to #11		
	b the tail fin is decidedly notched	Go to #12		
11	a the fish has 3 distinct dorsal fins (top side)	-----	Gadus morhua	Atlantic cod
	b the fish has 2 distinct dorsal fins	-----	Merluccius merluccius	Hake
12	a the lower jaw extend beyond the upper jaw	-----	Theragra chalcogramma	Amerian Pollock
	b the lower jaw does not extend beyond the upper jaw	-----	Melanogrammus aeglefinus	Haddock
13	a the fish has finlets	Go to #14		
	b the fish does not have finlets	Go to #15		
14	a the dorsal fins are widely separated	-----	Scomber scombrus	Mackerel
	b the dorsal fins are not separated widely	-----	Thunnus maccoyii	Bluefin tuna
15	a the fish as a small adipose fin	-----	Osmerus mordax	American smelt
	b the fish does not have a small adipose fin	-----	Alosa pseudoharengus	Alewife

Variables:

Dependent – _____

Independent – _____

Control – _____

Results

Data Table

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Limitations:

1. _____
2. _____

Sources of errors:

1. _____
2. _____

Conclusion:

Reflection:
