Lab #2

Name: _____

Date: _____

Topic: Living Organisms

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

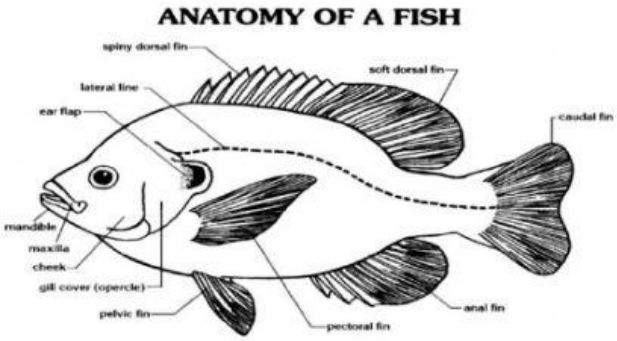
Skills being assessed: ORR

Materials:

- Pencil
- Dichotomous key
- Data table

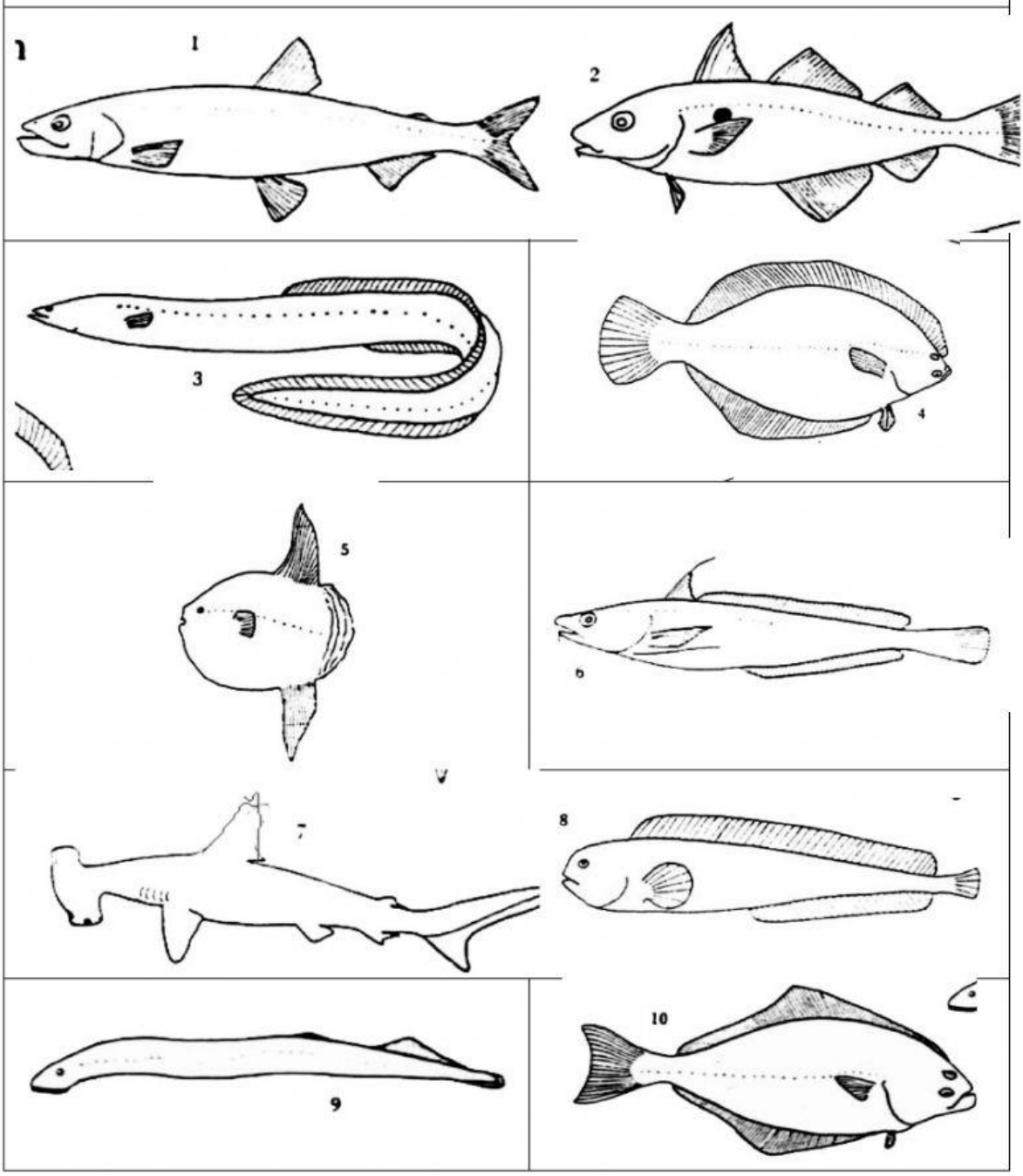
Procedure:

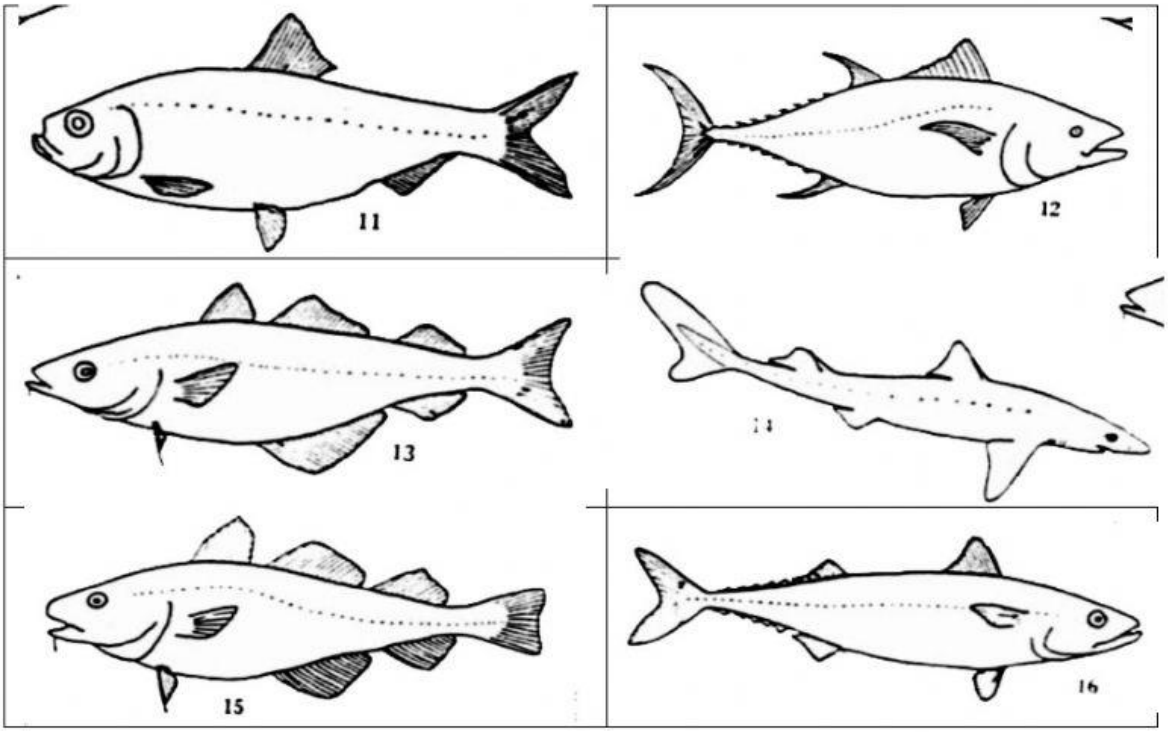
1. Use the image below as a guide to the parts of a fish's body that are used in the dichotomous key.



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 body 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	----------	**Hippolglossus Stenolepsis**	**Halibut**
	b the fish does not have a forked tail	----------	**Paralichythys Albigutta**	**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 chalcograma**	**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

_____

_____

Discussion:

Limitations:

1. _____

2. _____

Sources of errors:

1. _____

2. _____

Conclusion:

_____

_____

_____

_____

Reflection:

_____

_____

_____

_____

_____

_____