

Name: \_\_\_\_\_

## Shark Dissection Student Individual Packet

### Pre Lab Vocab:

Define the following vocab terms:

- Claspers-
- Cloaca-
- Dorsal Fin-
- Oviparous (Include Example Species)-
- Caudal Fin -
- Viviparous (Include Example Species)-
- Pectoral Fin-
- Lateral-Line System-
- Ampullae of Lorenzini-
- Placoid scales (with illustration)-
- Nares-
- Spiracles-

### Pre-Lab Agreement:

1. There will be no bringing food or drink to class AT ALL on the dissection day!
2. You must wear closed toed shoes on the dissection day
3. You must wear properly fitting clothes (no baggy pants or loose shirts) on the dissection day
4. Long hair must be pulled back or tied up.
5. NO HORSEPLAY DURING LAB!!!
6. Cellphones will only be permitted at one specific time during lab (teacher will announce)
7. Scalpels and scissors should be handled with extreme caution
8. If injury or illness occurs in your group tell the teacher immediately

I understand the rules of this lab and will comply with lab and class rules 100%. Failure to do so will result in me getting sent to ATS and receive written disciplinary actions. If I do not want to participate in this dissection or am absent for it I will be required to complete an alternate packet to fulfill the lab grade.

Print Name: \_\_\_\_\_ Sign Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Pre-Lab Procedure:

### Step 1 – Touch the shark

1. Describe the texture of the shark's skin when you run your hand in both directions.
2. Describe how the skeleton of the shark feels when you bend it. What is it similar to?

### Step 2 – Draw and label your shark

Side View of YOUR Shark



3. What is the function of the shark's Lateral Line?
4. Can you see any ampullae of Lorenzini? Describe what they look like and their function.
5. Describe the teeth of the dogfish shark, including orientation, number, etc.

### Step 3: Measure the shark.

1. How long is your shark? \_\_\_\_\_ cm
2. What is the distance between the 2 dorsal fins? \_\_\_\_\_ cm
3. What is the height of your caudal fin? \_\_\_\_\_ cm

# Dissection Individual Review Questions:

**Directions:** *Follow the steps in your procedures packet to dissect your Shark-*

1. Describe your shark's liver.
2. What did you find inside your shark's stomach? Describe the contents. What can you conclude about your shark's eating habits from this dissection?
3. What does the rugae look like? What is its function?
4. What is the benefit of having a cloaca?
5. Does your shark have testes or Ovaries? Describe their appearance and location.
6. Describe the chambers of your shark's heart? Why is the ventricle tougher than the atria?

## Analysis & Conclusion Questions:

1. List 5 traits/characteristics that are different between a clownfish and the shark (bony vs. cartilaginous fish traits).
2. What sensory organs did the shark have? List them all including what each did.
3. Discuss 3 adaptations for life in the water that a shark has.
4. What purpose do the spiracles serve? What do the gill lamellae do?
5. What type of scales does the shark have?
6. What is the purpose of the cloaca?
7. How does a shark maintain buoyancy (what does it use)?