

### NATURAL SELECTION & ADAPTATIONS

**\*\*\*DO NOT WRITE ON THIS PAPER. Take out a lined piece of paper, write your name on it & answer the following questions. Hand it in when you are finished!\*\*\***

1. Define the terms: adaptation, natural selection and adaptive radiation.
2. Describe the difference between structural, physiological, and behavioral adaptations.
3. Use the directions for Activity 3-1A found on page 109 of your Textbook. Match the Structural Adaptation with the Advantage.  
**e.g. Body 1 – Round: Advantage c: Difficult for the predator to swallow.**

Structure	Structural Adaptations	Advantages to the Organism
Body	1. Round 2. Torpedo-shaped 3. Flat from side to side 4. Flat from top to bottom	(a) Hides on the bottom (b) Swims at high speed (c) Is difficult to swallow (d) Is almost invisible from front and rear
Mouth	1. No teeth 2. Strong jaws; has teeth 3. Mouth angled downward; longer upper jaw 4. Mouth angled upward; longer lower jaw 5. Whisker-like structures called barbels (like those on a catfish) 6. Sucker-shaped mouth that acts like a vacuum	(a) Eats small plants and animals (b) Feeds on bottom; senses food in murky water (c) Feeds on prey that live above it at the surface (d) Eats easily swallowed micro-organisms (e) Preys on other fish (f) Feeds on prey that live below it on the bottom
Eyes	1. Large eyes 2. Both eyes on same side of head 3. Small eyes	(a) Lives in shallow water (b) Lives in deep water (c) Lies flat on the bottom

4. Copy the table onto your paper. Use the pictures of the fish given to you on the Power Point to fill in the table.

	Feeding Behaviour? How Do You Know?	Fast or Slow Swimmer? How Do You Know?	Deep Water, Shallow Water, or Bottom Dweller? Why?
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