FISH FOR THE FUTURE

Background:

It is the year 3000, and it is now possible for humans to build planets, and genetically engineer plants and animals to live on that planet. You are one of the scientists working on the animals, and it is your job to create a fish which will be perfectly suited to its environment on this new planet.

Task:

You need to pick one of the following environments of already created planets, and design a fish which is going to be strong and resilient enough to survive in that environment. You need to consider WHAT the fish is going to eat, HOW it is going to move to get its food, and WHAT parts it has to defend itself. Your fish must include <u>at least five</u> external anatomy structures covered in class.

Environments:

Please select 1 of the following:

1. This planet is dark and cold. The ocean floor is very mountainous. It rains almost all day. Because of the wet, dark conditions, only a few plants grow at the water's surface. Other marine animals on this planet include a swimming crab, a large nocturnal shark, a giant squid, and a variety of insects.

2. This planet is dry and hot. Most of the ocean floor is flat and covered in sand; although there are four patches of large rocks and coral. Each rock structure is about 50 miles apart. Marine animals on this planet include bottom clams, crabs that dig holes around the rocks, a school of red fish, and a type of dolphin.

3. This planet is tropical: wet and hot. Most of the ocean is covered by large kelp forests. A species of spiny algae grows thickly on the floor. The spines of this plant are poisonous, and any animal which touches one is sure to die. Marine animals include sea snakes, varieties of insects, and a school of 100+ silver-blue fish.

4. This planet has a moderate climate. The ocean bottom is partly mountainous and partly flat. Vegetation includes tall fans of coral with branched arms, and smaller seaweed red in color which bears ten fingerlike arms. Marine animals include insects, slow moving mammals, and a pod of nocturnal killer whales.

Completion:

You will have about 10 minutes to complete your task. Please be sure to thoroughly answer the questions on the worksheet about your new fish.

WANTED: A New Species of Fish

As the head scientist, what can you tell us about your fish?

Scientist Name: _____

Planet Chosen: _____

In the box above, draw a picture of your fish in its habitat. Think about your fish's shape, fins, and color.

Swimming Habits: (how your fish swims; based on its tail and body shape)

Eating Habits: (how and what your fish eats; based on its mouth shape)

Defense Adaptations: (how does your fish defend itself from predators)

Habitat: (where does your fish live in the water)

Species Name: (create a name that tells something about your fish)