**Symbiosis**

Multiple Choice

1. The remora, or suckerfish, feeds by attaching itself to the body of a larger fish such as a shark. This photo shows a lemon shark with several remoras underneath it. The shark is not affected by their interaction.

Identify which type of symbiotic relationship this is an example of.

1. Commensalism
2. Mutualism
3. Parasitism
4. The titan triggerfish (Balistoides viridescens) is so big, it moves rocks and pieces of coral around as it feeds on a reef. Smaller fish can then come in and eat food that was previously protected by the rocks and coral. The triggerfish itself is not affected by its relationship with the smaller fish.

Identify which type of symbiotic relationship this is an example of.

1. Commensalism
2. Parasitism
3. Mutualism
4. The hummingbird (Archilochus colubris) feeds on the nectar produced by flowers. As it feeds, pollen from the flowers sticks to its beak and is spread around, helping the plant to reproduce. Both the hummingbird and the plant are helped by this interaction.

Identify which type of symbiotic relationship this is an example of.

1. Commensalism
2. Parasitism
3. Mutualism
4. This is a single-celled organism called a flagellate. Many of these live peacefully in the guts of termites, which use the flagellates to help them digest cellulose from wood. Both the flagellates and the termites are helped by this interaction.

Identify which type of symbiotic relationship is this an example of.

1. Commensalism
2. Parasitism
3. Mutualism
4. This is a type of worm called a nematode. Many nematodes are known to live and reproduce inside human bodies. Unfortunately, this often results in disease for the humans.

Identify which type of symbiotic relationship this is an example of.

1. Commensalism
2. Parasitism
3. Mutualism
4. Mosquitoes feed by sucking blood from a larger host, like a human. This interaction harms the host organism.

Identify which type of symbiotic relationship this is an example of.

1. Mutualism
2. Parasitism
3. Commensalism

Which is the correct answer?

1. **Circle the correct answer.**

In one type of **harmful/genetic/symbiotic** relationship, both species involved gain something from the relationship. This kind of relationship is known as **mutualism/communism/parasitism/commensalism**.

1. **Circle the correct answer.**

Commensalism is a relationship between species in which one species **benefits/is harmed** and the other is **harmed/not affected**.

1. **Circle the correct answer.**

Parasitism is a relationship between species, which one species **benefits from/isn’t affected by/ isn’t aware of** the relationship and the other species **isn’t affected/goes extinct/isn’t harmed**.

Fill in the blanks

1. Use the following words to fill in the gaps.

**host, parasite, food, kill**

In parasitism, one organism (the \_\_\_\_\_\_\_\_\_\_\_\_\_) lives inside the body of a larger organism (the \_\_\_\_\_\_\_\_\_\_\_). An example of this is ringworms living inside the body of a human. The ringworms take nutrients from the human and can cause disease. However, they don’t \_\_\_\_\_\_\_\_\_\_\_\_ the human, as this would destroy their \_\_\_\_\_\_\_\_\_\_\_ source.

1. Use the following words to fill in the gaps.

**benefit, nectar, flowers**

In mutualism, two species \_\_\_\_\_\_\_\_\_\_\_\_\_\_ from their interaction with each other. A classic example of this pollination. In order to reproduce, many \_\_\_\_\_\_\_\_\_\_\_\_ need to attract an animal pollinator such as a butterfly. They do this with nectar, which gives the butterfly energy. The butterfly pollinates the flowers and feeds on \_\_\_\_\_\_\_\_\_\_\_\_\_ in return.

Short Answer

1. Describe the three main types of symbiosis. Provide a short description of each type.
2. Propose why you think a parasite, like a mosquito or headlouse, does not normally kill its host.
3. In your own words, describe and distinguish between the forms of symbiosis mutualism and commensalism.

Include relevant examples in your answer.