You have learned about animals by reading the article, “Who Wants a Spiny Snack?” and by exploring the Life at the Limits exhibition.

Now you will write a book to teach your friends about these animals.

Your book will include three animals. The first animal will be the spiny pufferfish. The other two animals will be from the Life at the Limits exhibition.

For each animal, name one body part that helps this animal. Then explain in your own words how this body part works. Include a drawing of each animal and label the body part that you have described.

There’s a pufferfish floating through the ocean, when a shark zooms towards it. How does the pufferfish survive? It uses its adaptation. Adaptations give organisms special abilities to survive and reproduce. Organisms have different and unique adaptations that fit their needs. All of this can be learned at the amazing Life at the Limits exhibit at the Natural History Museum. Some examples of organisms with adaptations are pufferfish, saturniid moths, and green sea turtles. Adaptations are essential to an organism surviving and reproducing in their natural habitat.

The pufferfish needs a certain adaptation to survive in its natural habitat—the deadly ocean. When a predator threatens it, it appeals as a normal fish. Then it uses its adaptation, to become puffed up and spiny. Their skin expands with water, and it puffs up so that it looks like a balloon. In addition, spikes, which usually rest on it, pop out. Now its transformation is complete. In "Who Wants
"A Spiny Snack?" it states "...The fish puffs out into a round spiny ball. The startled shark swims away." This adaptation helps the pufferfish survive predator attacks.

Other organisms have adaptations to reproduce. For example, male saturniid moths have the adaptation of their antennae, which smell female saturniid moths and then they will mate and reproduce. Saturniid moths die within a few days, because they can't eat, which makes it essential for them to reproduce and mate in just a few days. If they did not have their special antennae, they would go extinct.

The green sea turtle also has an essential adaptation to reproduce. Their flippers are very unique, powerful, and wing-like, which allows them to swim really far distances. They must swim far to get to mating grounds, where they will mate and reproduce. Then these turtles must make the long journey back. Adaptations are essential to green sea turtles reproducing.

Thus, organisms need adaptations to survive and reproduce in their natural environment. Some examples are pufferfish, saturniid moths, and green sea turtles. If it weren't for adaptations all organisms would be in great danger. Predators wouldn't have adaptations to attack, and prey wouldn't be able to protect themselves. This would affect all organisms, and would send the foodweb into deep trouble. Everyone and everything depends on adaptations. That's why adaptations are essential to organisms surviving and reproducing in their natural environments.
**Student Entry Sheet - Page 3**

1. **Pufferfish**
   - Spikes not out yet
   - Not puffed up yet
   - Spines go out like a shield
   - The pufferfish puffs up and expands with water

2. **Saturniid Moths**
   - The antennas help saturniid moths smell females, so they can mate and reproduce quickly.

3. **Green Sea Turtles**
   - Green sea turtles have powerful flippers that allow them to swim for distances to get to mating grounds.