COMMON MISCONCEPTIONS

• Animals' skins are just pretty patterns and stripes without a purpose.
  Animal coverings have several purposes. Many animals with patterns on their skin can camouflage. Fur can keep
  them warm and scales can help them retain water.

• Insects and spiders are not animals.
  Insects and spiders are part of the animal kingdom. Animals can be classified as invertebrates and vertebrates.
  Insects fall into the invertebrate category (no backbone). Vertebrates include fish, birds, mammals, reptiles and
  amphibians.

• Animal external parts don’t have a specific function.
  All animal external parts have specific functions that help in their survival. These structures have adapted and
  changed over many generations to better suit their needs.

ANIMAL STRUCTURES AND FUNCTIONS

Animals have specific external structures that help them to survive in their environments. Students may already be
familiar with many external parts, so in this lesson you should connect the part to their purpose and explain how it
helps the animal achieve its goals. Learning about animal external parts is a natural first topic that will lead into animal
adaptations and natural selection in older grades. Helping students understand that animal parts are cool and interesting
to look at, but more importantly they have specific purposes that help them survive, is key.

TIPS FOR TEACHERS

Introduce your students to a wide variety of animals that are not the common animals they are used to seeing in the zoo
or on a farm. One idea is to have an “Animal of the Day” to feature as you go through your life science unit. As you do so,
be sure to point out unique animal structures and discuss how the structures help the animal to survive.