Welcome to the Living Desert! We are excited to have you here and meet all of our wonderful animals! As you are walking around the zoo, be sure that you are wearing your scientist goggles as there is always so much to discover and learn!

**As you tour North America...**

1. List 3 animals you saw from North America and list one of their adaptations for living in a desert.
   - Describe how the adaptation helps that animal survive in a desert habitat.
   - Desert Tortoise, they have strong, front legs to dig burrows to keep cool under ground.
   - Mountain Lions, they are awake at night (nocturnal) to keep cool when they are most active.
   - Peccary, they use their hooves to dig shallow holes so they can wallow and dust bath to cool off.

**As you tour Africa...**

The African savannahs and deserts are also hot and dry like the North American deserts but danger can hide around every corner! Animals that eat other animals are called **predators** and have to have special **adaptations** to catch their food while animals who get eaten, the **prey**, need special **adaptations** to avoid being eaten!

2. In the boxes below, find and draw one predator animal and label its adaptations to hunt and catch prey and then find and draw one prey animal and label its adaptations to keep it safe from predators.

**Predator:** Cheetah

- Black lines under eyes absorb sunlight to see better
- Long tail helps with balance and turning as cheetahs chase their prey

**Prey:** Grevy’s Zebra

- Stripes help break up the outline to make it harder to see
- Big ears for good hearing and listen for hiding predators
Before you go home...

Today at the zoo you saw all kinds of different animals and their amazing adaptations that allow them to survive in the deserts of North America and Africa. Humans can learn a lot from animals and take inspiration from them to build inventions and better technologies that can help us have better lives!

Think of a problem you, your family, your teacher or your class has. Maybe you want a more comfortable and safer helmet when you ride your bike? Maybe you want a backpack that is better at carrying all your school supplies? Or maybe you want to run faster like a cheetah! Take inspiration from an animal and its adaptations you saw at the zoo and design a new invention to help solve that problem!

3. What is the problem? I want a more comfortable and safer helmet.

4. Why is it a problem? I want to be safe and not get hurt when I ride my bike.

5. What is your animal adaptation inspiration? The shell of the Desert Tortoise

6. What is your new invention and how does it help solve your problem? My invention would be a helmet in the shape of a desert tortoise shell. It would be made of lots of different strong pieces put together like the scales and scutes of the tortoise shell. It would also have two layers like the tortoise shell, too.
7. Draw a picture of your invention that solves the problem and describe how it works.

Because of the two layers and the several different connected pieces, the helmet is stronger and able to absorb shock and survive if I fall and hit my head.