**DETOUR**

**Team Name:** OGE 1

**Exhibit or Area of Zoo:** Zebras

**List the observation, or discrepant event, that prompted your curiosity.**

Stripes graphic

**What SCIENCE questions or prompts come to mind?**

Recall what you know about thermal radiation and colors. Why might zebras have white stripes (thermal regulation).

**What TECHNOLOGY questions or prompts come to mind?**

A zebra’s stripes are like our fingerprints. Take your fingerprints and compare with a neighbor. How is this technology useful in our world.

**What ENGINEERING questions or prompts come to mind?**

Taking a cue from the zebra, design a clothing to both protect and cool.

**What MATH questions or prompts come to mind?**

Compare the distinguishing stripe patterns between the 3 main zebra species. Pair the stripe patterns with the data of regions they are found in and draw conclusions.

**DETOUR**

**Team Name:** OGE 1

**Exhibit or Area of Zoo:** OK Trails - Aviary

**List the observation, or discrepant event, that prompted your curiosity.**

The long tail of the native Oklahoma State bird, the Scissor-Tailed Flycatcher.

**What SCIENCE questions or prompts come to mind?**

Explore migration habits of our state bird. Why do they need to migrate?

**What TECHNOLOGY questions or prompts come to mind?**

What types of technology are used to track these birds?

**What ENGINEERING questions or prompts come to mind?**

What substrates would you give this bird in captivity in order for it to build its own nest?

**What MATH questions or prompts come to mind?**

Compare and contrast population/migration data across years and analyze differences.

**DETOUR**

**Team Name:** OGE 1

**Exhibit or Area of Zoo:** Herpetarium

**List the observation, or discrepant event, that prompted your curiosity.**

West African Gaboon Viper

**What SCIENCE questions or prompts come to mind?**

This snake is venomous. What is the difference between venomous and poisonous?

**What TECHNOLOGY questions or prompts come to mind?**

What tools and technology might be used to feed a venomous snake in captivity safely?

**What ENGINEERING questions or prompts come to mind?**

Considering the force and biology of such an animal, how can we create a “natural” captive environment for this organism? (Safety glass, stone, etc.)

**What MATH questions or prompts come to mind?**

Compare observable geometric patterns between specimens within the same species.

**DETOUR**

**Team Name:** OGE 1

**Exhibit or Area of Zoo:** Pachyderm

**List the observation, or discrepant event, that prompted your curiosity.**

Pygmy Hippo “Wooly”

**What SCIENCE questions or prompts come to mind?**

Research the natural history of the hippo.

**What TECHNOLOGY questions or prompts come to mind?**

Understanding that hippos are mostly aquatic mammals, what technology might be used to provide a suitable habitat for Wooly?

**What ENGINEERING questions or prompts come to mind?**

What types of simple or complex machines are used to maintain and care for Wooly?

**What MATH questions or prompts come to mind?**

Hippos require X amount of food intake per kilogram of body mass. If Wooly has a massy of Y kg, how much food would he need to eat in 1 month?