**DETOUR**

**Team Name:** OSU 2

**Exhibit or Area of Zoo:** Elephants

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

Read the sign about poaching & other dangers to elephants; observed the elephant presentation. For a large animal, it has great balance (if trained).

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

What would be the evolutionary advantages of tuskless elephants? Disadvantages?

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

What cultures did or still use an elephants strength as a means of production/developing infrastructure?

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

What could serve as a substitute for ivory? What qualities/protein does it have?

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

How many pounds of pressure would an elephant exert if it were standing on 1 sq inch?

**DETOUR**

**Team Name:** OSU 2

**Exhibit or Area of Zoo:** Rhino

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

Eating grass, don’t have a gall bladder, padded feet, short right ear, horn made of keratin (similar to hair and nails on human)

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

What protein that is found in human nails and hair does the rhino’s horn consist of?

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

How could the rhino’s exterior help develop military armor?

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

How strong would a fence have to be to hold a charging rhino?

How much force would the fence have to take?

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

How many stomachs does a rhino have?

How much time does digestion take?

**DETOUR**

**Team Name:** OSU 2

**Exhibit or Area of Zoo:** Orangutans

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

Canopy; speed, distance in swinging; resting, by hanging on wall near people observing

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

What phylum is an orangutan in?

Describe the process of brachiatia.

Compare & contrast human skull and orangutan skull.

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

How could we adapt brachiation for military use?

Brain waves - language in humans vs. orangutan language development

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

What structures and building spaces do orangutans build?

How would they build? With what tools?

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

What is the average grip strength of an orangutan compared to a human?

How much distance can an orangutan swing in each swing?

**DETOUR**

**Team Name:** OSU 2

**Exhibit or Area of Zoo:** Bamboo in Cat exhibit

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

Everywhere we turn, we see bamboo. We see various heights. Some are thick, some are thin.

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

How does bamboo protect itself from continuous grazing?

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

What are the benefits of bamboo as a material in clothes, structures, flooring, etc.?

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

What products are made from bamboo? What are the benefits?

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

What’s the growth rate?