Human Evolution
What to know before you go

Before your students visit the Museum, be sure to prepare them with the proper vocabulary and understandings necessary to complete this activity.

ESSENTIAL UNDERSTANDING:

Biological diversity is a result of evolutionary processes. As environments change over time, living things must adapt or go extinct. Different traits are favored in different habitats and are passed on to future generations.

ESSENTIAL QUESTIONS:

> What is an adaptation?
> > Why and how do organisms adapt?
> What defines something as a mammal?
> What is a classification scheme?
> How do classification systems help us better understand the relationships between living and non-living things?
> What is evolution and how does it occur?

VOCABULARY TO KNOW:

Observation, Inference, Adaptation, Classification, Ecosystem, Food Web, Food Chain, Predator, Prey, Environment, Mutualism, Parasitism, Biotic, Abiotic, Competition, Producer, Consumer, Organism, Biodiversity, Natural Selection

NATURAL HISTORY
MUSEUM OF UTAH
Rio Tinto Center | The University of Utah

Human Evolution
9-12th Grade Biology

Bears, elephants, whales, coyotes, and mice are all classified as **mammals.** Interestingly, **humans** and our ancestors are classified in this same group, too.

Describe or diagram: what features do *most* mammals have in common?

Some mammals, like polar bears, have thick fur coats, while others mammals have hardly any noticeable fur at all, like an elephant or modern human.

Why do you think animals classified in the same group, *mammals*, have many different features and appearances?

**Find the wall of hominid (human-like) skulls in the Life Gallery (Level 4).**

When anthropologists make comparisons between modern and ancient hominids, some of the features they observe closely on the skull are: **brow shape, eyes**, and **teeth.**

Brow Shape

Eyes

Teeth
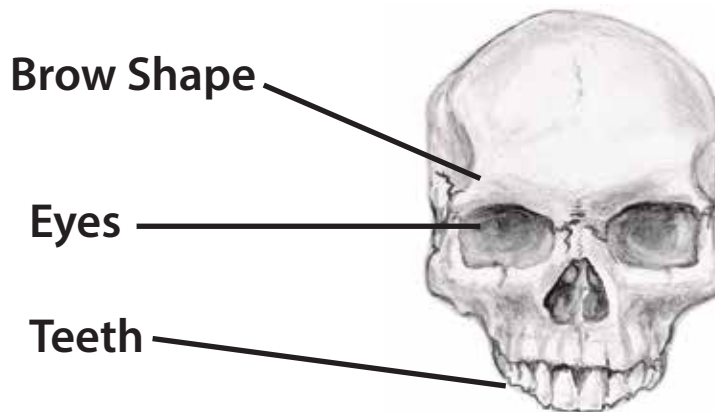
Choose 2 skulls from the wall to compare and contrast. Record your observations in the Venn Diagram below.

Skull #1: _____

Skull #2: _____
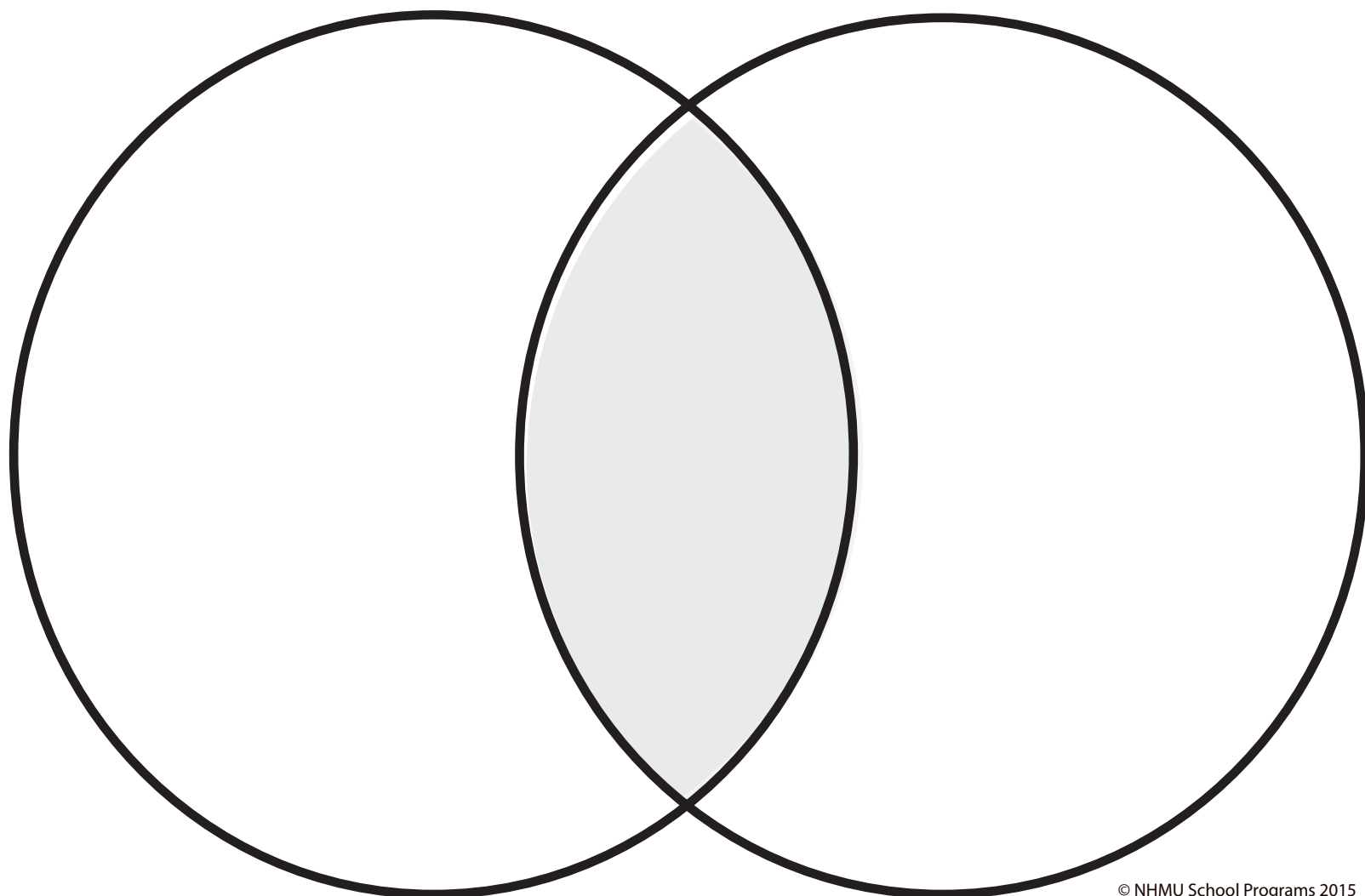
Did You Know?

Fossils from our human-like ancestors have been found in Asia, Africa, the Middle East, Europe, and Australia. Just like polar bears have adapted a thick, warm fur coat for living in the Arctic, ancient humans also had to adapt special features for living in their different habitats/biomes, too.

Using the information you collected in your Venn Diagram, did you notice any differences between the eyes, nose or teeth of the two skulls? **Why do you think these skulls look different from one another?**

Do your skulls have anything in common? If so, why do you think the skulls share similar features? **Explain your thinking.**