

Name _____

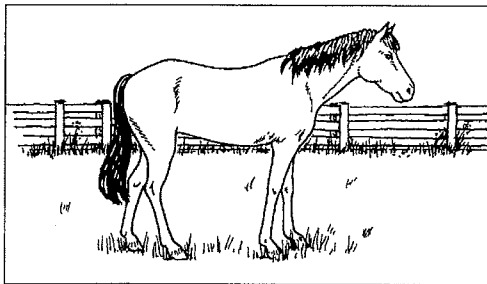
**Day
1**

Weekly Question
**Can horses and zebras
have babies together?**

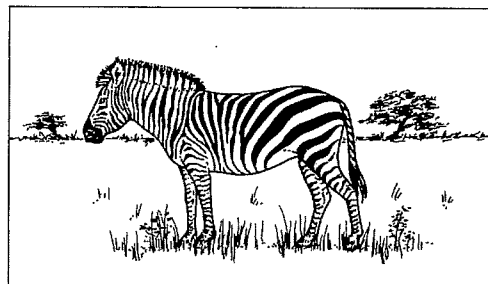
Horses are ideal animals for riding. They are tame, swift, and agile. They are also easy and comfortable to sit on because of the shape of their backs. But horses are delicate animals. They don't do well in hot, dry conditions. And they are prone to catching certain diseases.

Zebras, on the other hand, are very strong. They are sturdy and tolerant of heat and drought. Also, they are more resistant to disease. But zebras can't be easily tamed, and their body shape makes them difficult to ride.

These characteristics of horses and zebras are **inherited traits**, which are features that are passed down from parents to offspring. Inherited traits may be physical, such as a zebra's stripes, or behavioral, such as a horse's gentle nature.



horse



zebra

A. Identify each trait as either *physical* or *behavioral*.

- | | |
|----------------|---------------------|
| 1. agile _____ | 4. strong _____ |
| 2. tame _____ | 5. curly hair _____ |
| 3. shy _____ | |

B. Name two traits that you have inherited from either of your parents. Write whether each trait is *physical* or *behavioral*.

1. _____
2. _____



Vocabulary

inherited traits

in-HAIR-ih-tid
TRAYTZ
physical or behavioral characteristics that are passed down from parents to offspring

Name _____

**Day
2**

Weekly Question

Can horses and zebras have babies together?

Scientists arrange living organisms into groups based on common inherited traits. Horses and zebras have several traits in common. Both have hooves. Both have manes and long tails. Both eat grasses, leaves, and twigs. Because of these and other traits, horses and zebras belong to the same **genus**.

Yet horses and zebras have their own unique traits, which is why they belong to separate **species**. Organisms within a species have many more traits in common than organisms in the same genus. In fact, it is often difficult to distinguish between members of the same species. The most important trait of a species is that its members are able to breed with each other to produce **fertile** offspring. A horse can breed with other horses, and a zebra can breed with other zebras. The offspring will look very similar to their parents.

A. Write true or false.

- 1. Animals within the same species can produce fertile offspring. _____
- 2. It is often hard to distinguish between animals in the same genus. _____
- 3. Scientists group organisms mostly according to size. _____

B. In your own words, explain the differences between a species and a genus.

C. Based on what you have read, name an animal that would likely be in the same genus as a lion. Explain your answer.



Vocabulary

fertile
FUR-tul
able to reproduce

genus
JEE-nus
a group of closely related species that share major traits

species
SPEE-sheez
a type of organism that can reproduce with others of the same type

Name _____

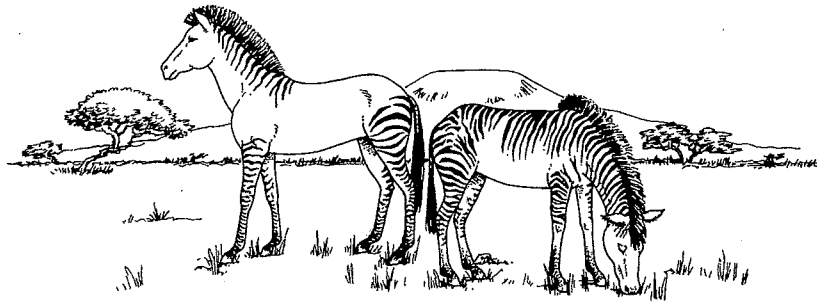
**Day
3**

Weekly Question
**Can horses and zebras
have babies together?**

Some closely related species, such as zebras and horses, can reproduce with each other. When two organisms from different species mate, they produce a **hybrid**. The hybrid offspring of a horse and a zebra is called a *zebroid* (ZEH-broyd).

Like all offspring, hybrids inherit traits from both parents. In general, a zebroid resembles a horse in body shape and size and can be easily tamed. But it also has the telltale stripes, spiky mane, and resistance to disease of a zebra.

- A.** Write a caption for the picture, explaining why a zebroid is different from a horse or a zebra. Use the words *hybrid* and *traits* in your caption.



- B.** According to the passage, which traits does a zebroid get from a zebra, and which does it get from a horse? Fill in the chart.

Zebra Traits	Horse Traits

Daily Science
**Big
Idea 1**
WEEK 1

Vocabulary

hybrid

HI-brid
the offspring of two organisms from different species

Name _____

**Day
4**

Weekly Question

Can horses and zebras have babies together?

The special combination of traits that zebroids have makes them excellent pack animals. Today, these unique creatures are bred for just this purpose in Kenya and South Africa, where the climate is hot and dry.

Many people, including some scientists, believe that hybrids should not be bred at all. Zebroids don't exist in nature. Also, they are **sterile**, which means they can't produce offspring. Finally, a hybrid's inherited traits can be unpredictable. One zebroid, for example, can look and act much differently from another zebroid.

A. Name three differences between hybrids and offspring of the same species.

- 1. _____
- 2. _____
- 3. _____

B. *Sterile* is a word that has more than one meaning. Write what you think the word *sterile* means in each of the following sentences.

1. Wendy cut her finger and needed a sterile bandage.

2. Andy couldn't get sterile seeds to grow in her garden.

3. Patrick fell asleep listening to the sterile lecture.



Do you think people should be creating hybrids? Why or why not? Discuss your opinions with a partner.



Vocabulary

sterile
STAIR-ul
infertile, or unable to reproduce

Name _____



**Day
5**

Weekly Question

**Can horses and zebras
have babies together?**

A. Use the words in the box to complete the paragraph.

genus hybrid sterile
fertile species inherited traits

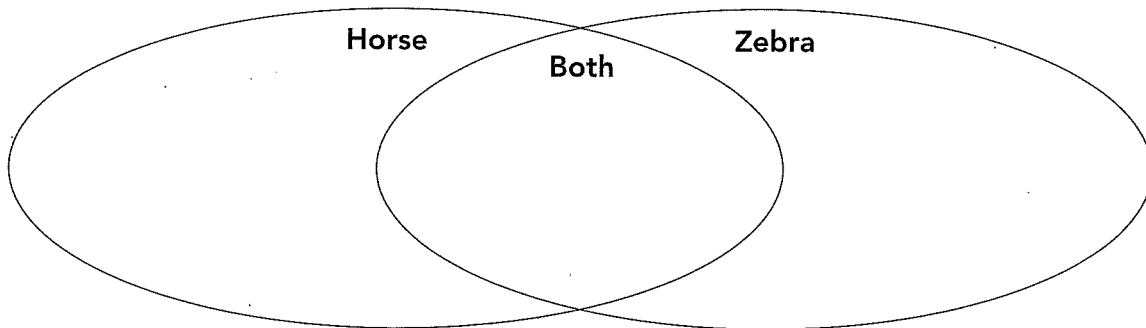
_____ are passed down from parents to offspring.

Organisms in the same _____ share similar traits.

However, unlike those within the same _____, they are unable to breed and produce _____ offspring.

When two organisms from closely related species mate, they create a _____ that is _____.

B. In the outer parts of the diagram, write two different traits of each species. In the middle, write two traits that the species share.



C. State one reason why someone might want to breed a zebroid. Then state one possible reason why zebroids should not be bred.
