GIRAFFE CART COMMON CORE TALKING POINTS

Grade 1

1. Animals use their external parts to help them survive, grow and meet their needs.

Is it easy to see a giraffe if it is standing behind a tree?

Examine the color and pattern on the pelt which helps the giraffe to hide.

Why are long legs and advantage when you are a prey animal?

Connect long legs with the ability to run from predators.

If you lived in an area with tall grasses would you rather be short or tall?

Height provides an advantage in seeing predators approach and enables the giraffe to warn other animals on approaching danger. (You might have a contest between the tallest and the shortest student in the group and see who can see the farthest away).

If you spent your day eating leaves, would you rather have your eyes set in the front or on the sides of your face?

Examine the giraffe skull for the position of the eyes.

Ask a student to stick out it's tongue and hold the fake giraffe tongue to see who has the longer tongue. Then ask "Why does a giraffe need to have a tongue that long?".

Use this exercise to illustrate an adaptation for eating from trees.

2. Determine patterns in behavior of parents and offspring that help offspring survive.

Ask how long it take for a human baby to learn to walk? Feed itself?

Point out that infant giraffes can stand, walk and run within an hour of birth.

Why is that important for the baby's survival?

Ask students what they do when they are afraid?

Discuss the giraffe's flight reaction in the face of danger. Compare how fast a car drives down Lincoln Avenue with how fast the giraffe can run (35mph). The babies can't run quite so fast and sometimes get separated from the parent and don't survive as a result. Survival is not easy for a baby giraffe.

Ask students if they know how tall they are?

Tell them that giraffe infants are between 5'6" and 6' tall at birth. Explain that extreme height at birth is essential for the baby to nurse. Mothers and babies recognize each other through sense of smell and mom frequently bonds with the baby through licking. Giraffes also emit sounds that our ears don't always hear.

3. Young plants and animals are like, but not exactly like, their parents.

Look at the animals: Try to locate our youngest giraffe. What does the smallest giraffe and the other giraffes have in common? How are they different?

With the exception of size, why do young giraffes need to look like the adult giraffes? Talk about the need for baby prey animals to find shelter within the herd.

Is it safer for a baby giraffe to look like different from it's mother? Why?

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Grade 2

1. Make observations of plants and animals to compare the diversity of life in different habitats.

What other animals do you see living in our savanna?

Explain that each of the other animals serves and important role in the savanna.

Giraffes eat from the top branches of trees

Zebras eat tough tall grasses

Kudu eat short tender shoots

Ostriches eat the insects as the hoofed animals turn over the soil

Maribou Storsk clean the remains of dead animals.

Why are there no lions, cheetahs or leopards in our savanna?

Grade 3:

1. All organisms have unique and diverse life cycles, but all have in common birth, growth, reproduction and death

How many months does it take to make a human baby?

It takes about 14 months to make a baby giraffe. Giraffes have to be able to stand and run within an hour of its birth. Girls are adults by age 3-4 years, but boys aren't adults until they are 6 - 7 years old. They live 10 - 15 years in the world, but 25 years in a zoo.

2. All animals have traits inherited from parents, but variation exists within that species.

Male giraffes are usually taller than females and have larger/more ossicones. There may be variations in the pattern and shade of the coat, but not so much variation that it looks like a member of another subspecies of giraffe. The reticulation on the face is unique to each individual animal.

3. Animals have traits they inherit from their parents and those traits can vary and also be influenced by the environment.

Giraffes don't normally eat salt, but because of San Francisco's salty air, you will frequently see some of our giraffes licking the side of their barn to eat the salt. They have developed a taste for salt.

4. Variation within a species can provide advantages in surviving, finding mates and reproducing.

The strongest of the male giraffes are able to push weaker males out of their territory and therefore get to mate with more females. Giraffes fight by sparring with their necks.

5. Animals form groups that help them survive

Do you feel safer walking home with a group of people or by yourself? Why?

Do you think animals have a better chance surviving if they are in a herd or if they are solitary?

How does the herd help protect each animal?

Look at the giraffes. How much of their time are they spending with each other?

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Giraffes are not very social and live in very loose herds. A herd usually consists of one adult male and several females. Look at the size of the giraffe's hoofs.

What would happen to you if you were kicked by a giraffe?

Who spends more time together, the giraffes or the zebras?

Giraffes live in a loose herd but rely more on their size, their strong hooves and their ability to run fast to protect them.

Most big cats will avoid confrontation with an adult giraffe.

Zebras feel safer if they hang together because predators have difficulty identifying a single animal to attack.

6. In a particular habitat, some animals survive well, some survive less well and some cannot survive at all.

In the Savanna, there is no rain for several months of the year. Those animals that can go the longest without drinking water have the best chance of surviving. Giraffes can go for weeks without drinking water as long as they can get moisture from leaves. They can go longer than a camel without drinking.

7. When an environment changes, the types of animals that live there may change.

If rain became very scarce in the savanna, which animals would not be able to live there?

Many of the animals, probably most, would not survive. Climate change is causing the Sahara desert to migrate to the south thereby changing some existing habitats into deserts.

If the area became very cold, which animals would not be able to live there?

None would survive there. Animals would need long, thick fur and be able to eat other kinds of food.

Grade 4

1. Plants and animals have internal and external structures that function to support survival, growth, behavior and reproduction.

Giraffes have been on the planet for a very long time (6 million years). Look at the giraffes and tell me if you see anything that could explain why this animal has been on earth for so long? color and spots for camouflage, long legs for defensive running, good eye sight, too tall for other animals to challenge, little competition for food in trees

What things did your mother do to take care of you when you were a baby? What kinds of things does a giraffe mother have to do to care for her calf?

Feeding, protection from predators

What kinds of things must the mother teach the baby?

Kinds of food to eat. How to behave around other animals.

Are young giraffes exactly like their parents or are there differences?

Young giraffes mostly look like their parents, but they are smaller in size and have tiny ossicones. There may be small variations in the pattern and shade of their coats, but not so much that they look like other subspecies of giraffes. Overall, they look like miniature versions of their parents.

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San Francisco Zoo

Grade 5

Food is needed to carry on all the functions of life. Animals derive their food from a variety of sources. All food sources can be traced back to plants. Plants get their energy from the sun.

What do giraffes eat?
What eats the giraffe?
Does anyone eat the lion?
What happens to the lion's body when it dies?

Relevant cart items: pelt, skull, leg bones, woody branch, tongue.

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