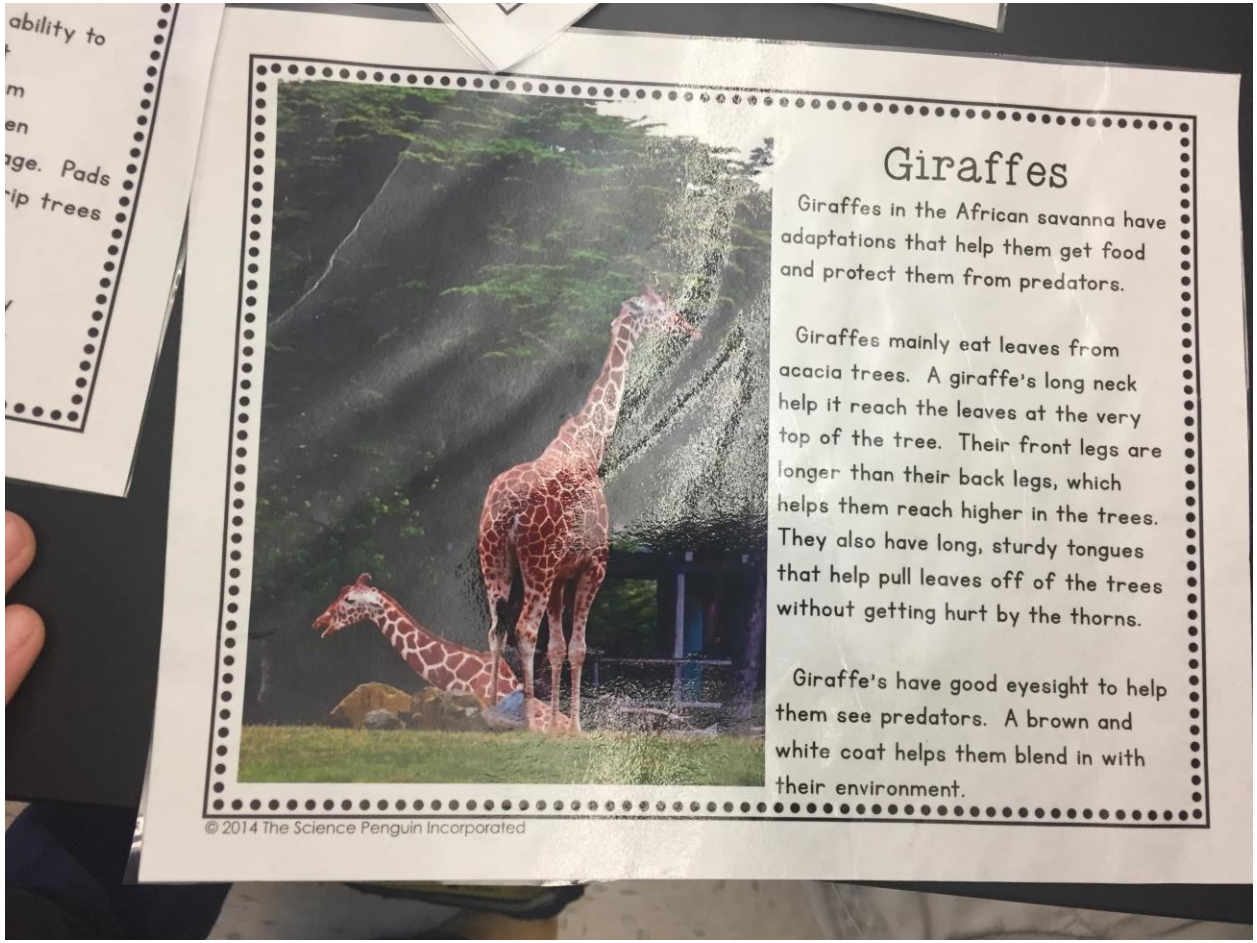
Madagascar Geckos

Madagascar geckos are arboreal, which means they spend most of their time in trees in a tropical location.

Camouflage and the ability to climb tall trees protect Madagascar geckos from predators. A bright green coloring acts as camouflage. Pads on their toes help them grip trees when climbing.

They are omnivores, mainly feeding on insects and sweet fruits or nectar.

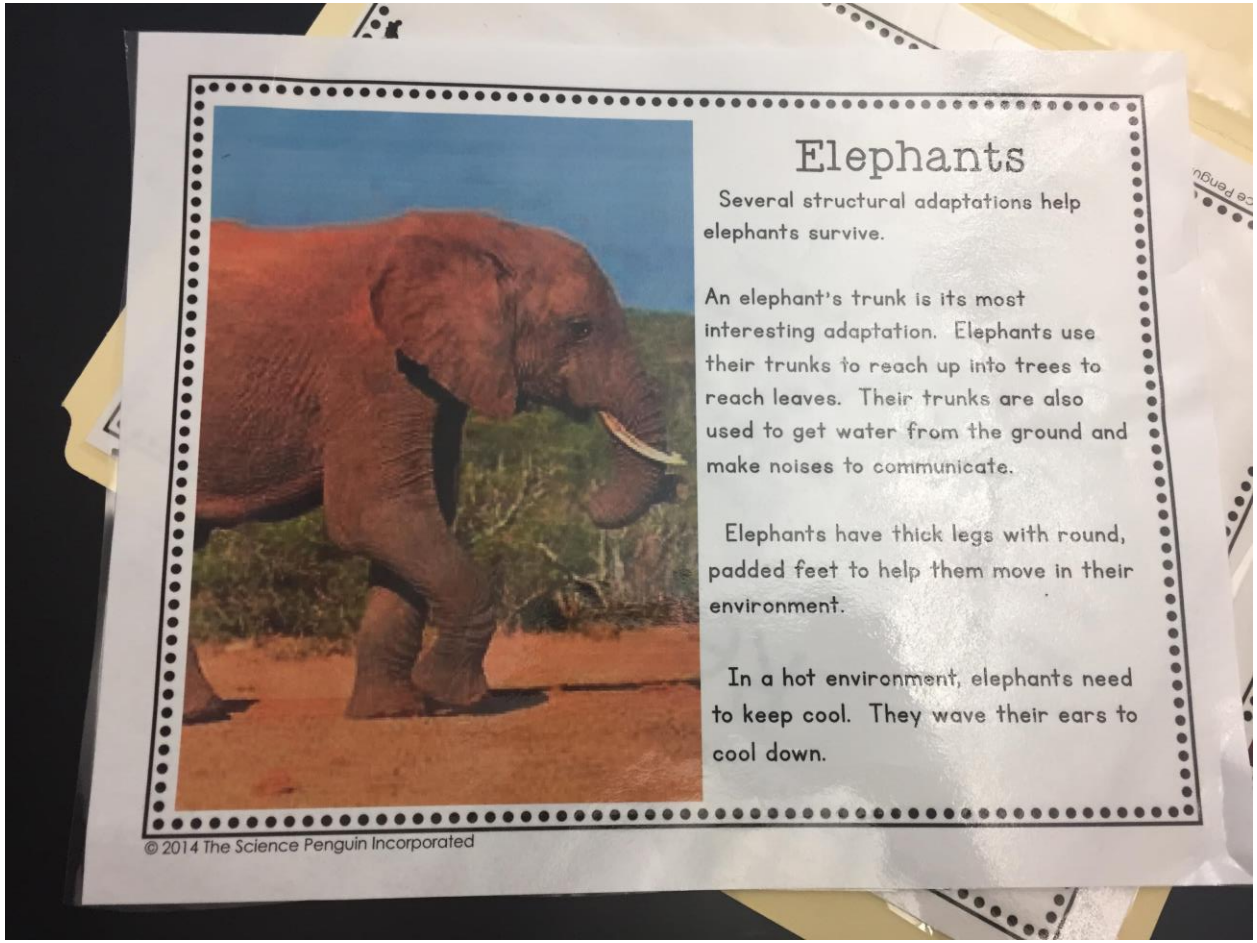


Giraffes

Giraffes in the African savanna have adaptations that help them get food and protect them from predators.

Giraffes mainly eat leaves from acacia trees. A giraffe's long neck help it reach the leaves at the very top of the tree. Their front legs are longer than their back legs, which helps them reach higher in the trees. They also have long, sturdy tongues that help pull leaves off of the trees without getting hurt by the thorns.

Giraffe's have good eyesight to help them see predators. A brown and white coat helps them blend in with their environment.



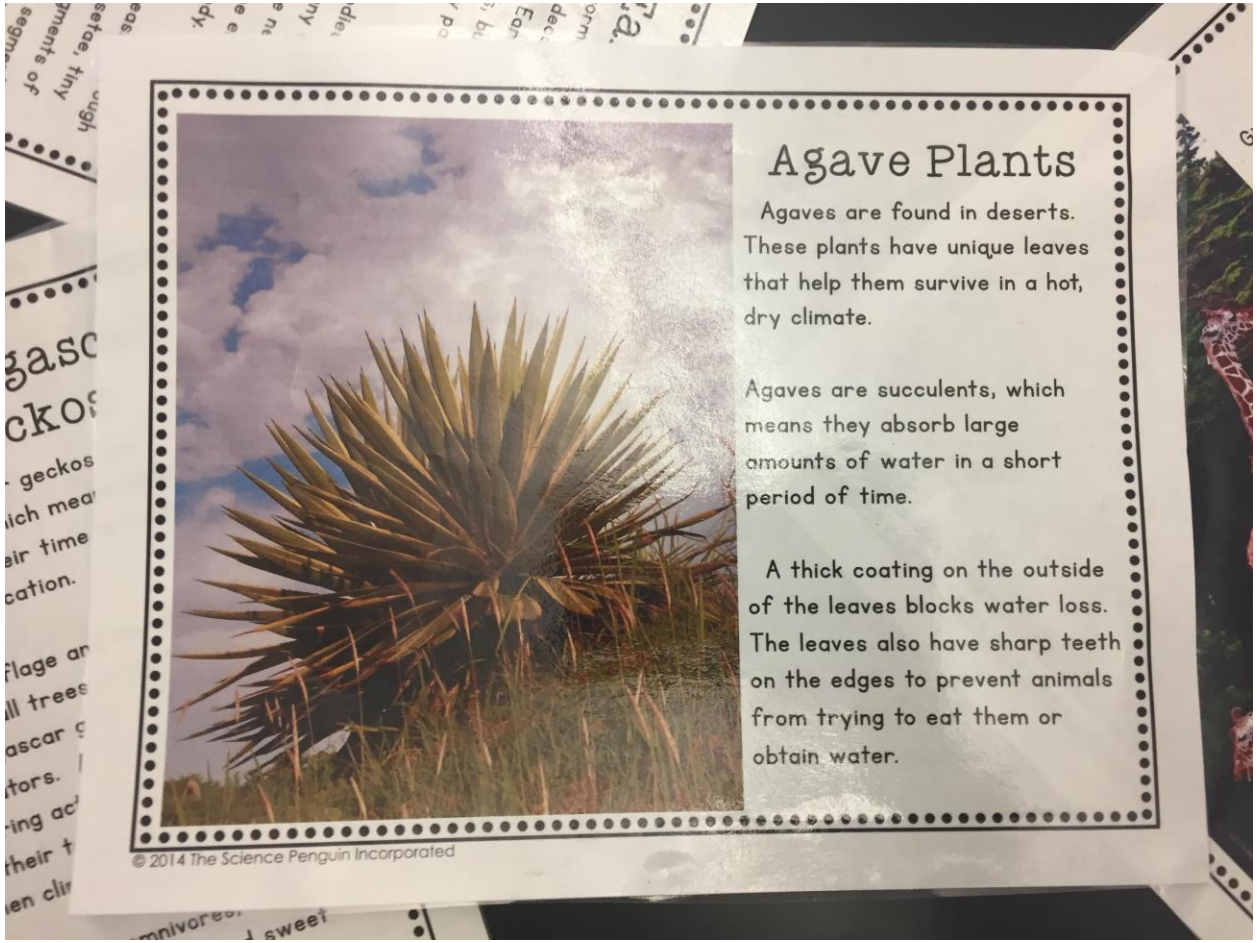
Elephants

Several structural adaptations help elephants survive.

An elephant's trunk is its most interesting adaptation. Elephants use their trunks to reach up into trees to reach leaves. Their trunks are also used to get water from the ground and make noises to communicate.

Elephants have thick legs with round, padded feet to help them move in their environment.

In a hot environment, elephants need to keep cool. They wave their ears to cool down.

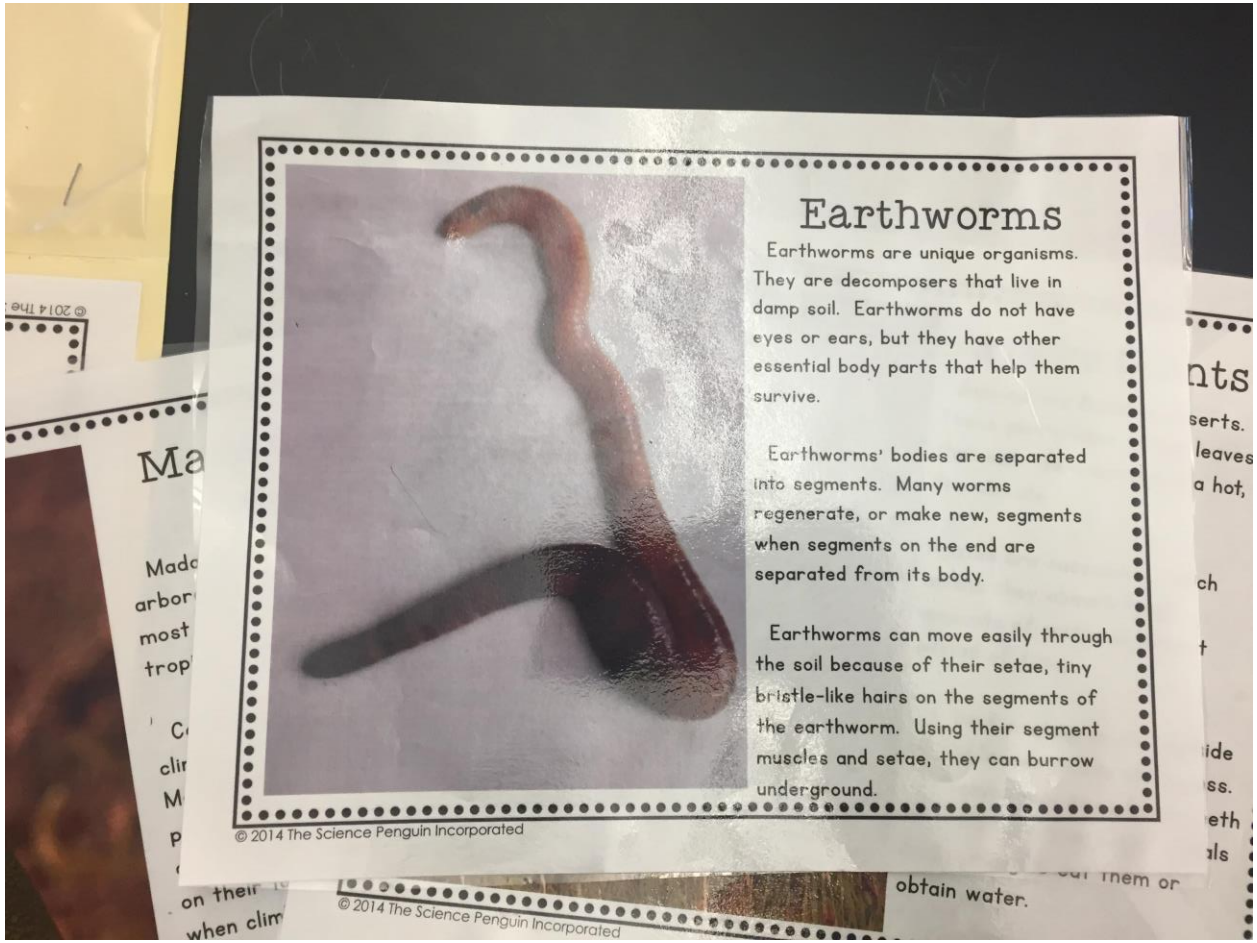


Agave Plants

Agaves are found in deserts. These plants have unique leaves that help them survive in a hot, dry climate.

Agaves are succulents, which means they absorb large amounts of water in a short period of time.

A thick coating on the outside of the leaves blocks water loss. The leaves also have sharp teeth on the edges to prevent animals from trying to eat them or obtain water.



Earthworms

Earthworms are unique organisms. They are decomposers that live in damp soil. Earthworms do not have eyes or ears, but they have other essential body parts that help them survive.

Earthworms' bodies are separated into segments. Many worms regenerate, or make new, segments when segments on the end are separated from its body.

Earthworms can move easily through the soil because of their setae, tiny bristle-like hairs on the segments of the earthworm. Using their segment muscles and setae, they can burrow underground.

Explain It!

1. Read the information table describing polar bears and black bears.

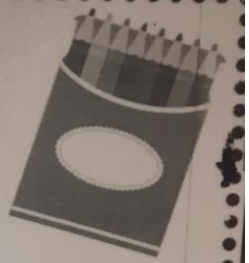
2. Compare and contrast polar bears and black bears using a Venn Diagram.

3. Answer the following question.
   While both species are bears, they have different adaptations. How do those adaptations differ in order to help each species thrive in its environment?

Explain It!

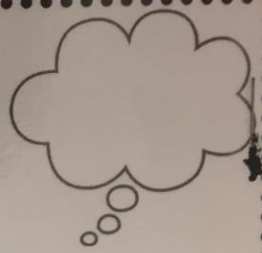
Characteristic	Black Bears	Polar Bears
fur	thick black fur that keep it warm through hibernation in the winter	thick white fur allows sunlight to pass through to the bear's skin to be absorbed
hibernation	hibernate during winter if it is cold enough	do not hibernate
diet	omnivores that eat twigs, berries, fish, and small mammals	carnivores that mainly feed on ringed seals
environment	forests and mountains in North America	live in extremely frigid temperatures in the Arctic
metabolism	metabolism drops by over 75% during hibernation, allowing black bears to sleep without needing to eat	can slow their metabolism down after not eating for 7-10 days

Draw It!



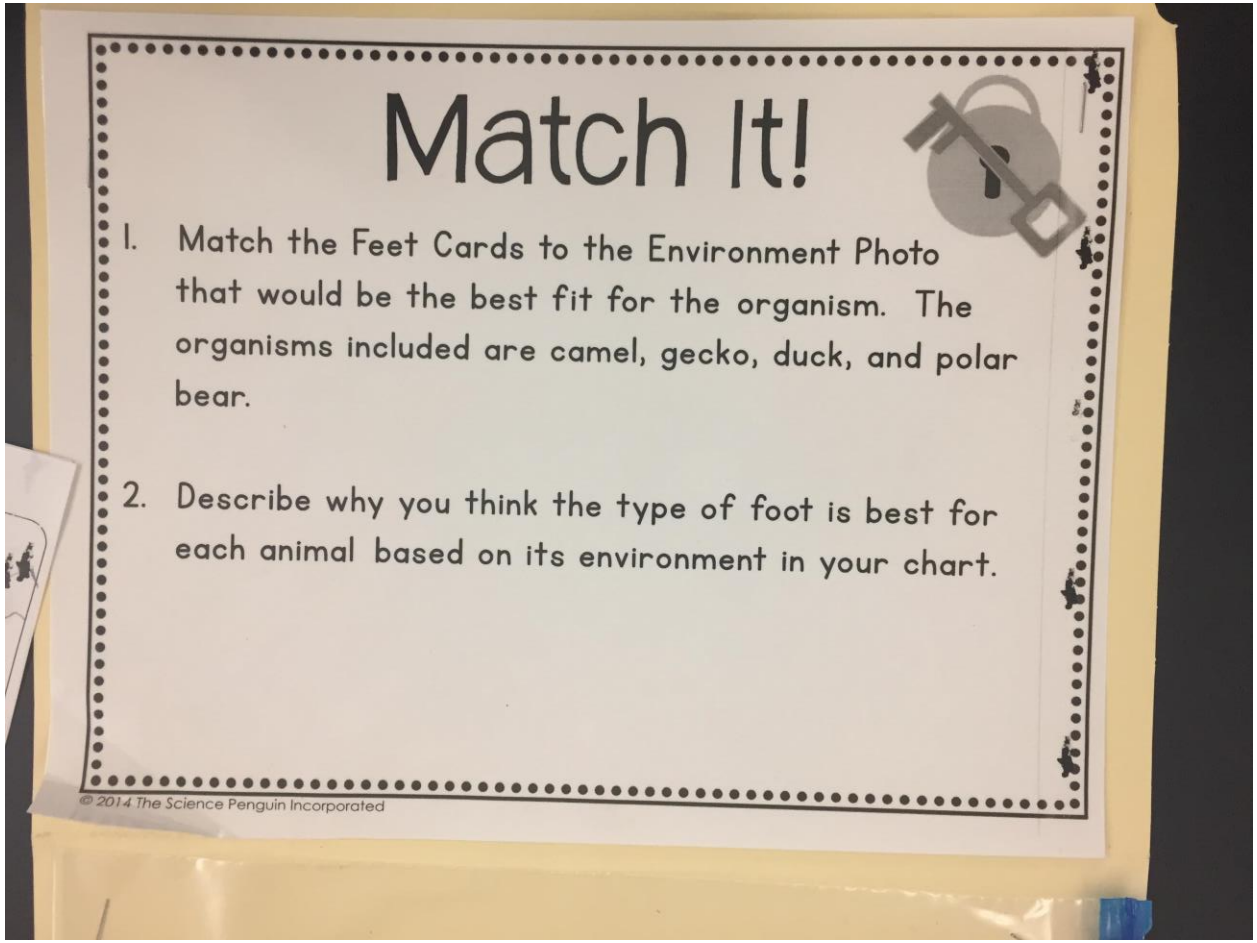
1. For each vocabulary term, read the definition and draw a detailed illustration that represents that term.

Analyze It!



1. Closely examine photo of the raccoon.
2. Write what you observe in the photo.
3. Write what you know about this from science.
4. Using the photo, write 1 or 2 conclusions you can draw about a raccoon's structural adaptations.

Analyze It! Photo


Match It!
1. Match the Feet Cards to the Environment Photo that would be the best fit for the organism. The organisms included are camel, gecko, duck, and polar bear.
2. Describe why you think the type of foot is best for each animal based on its environment in your chart.
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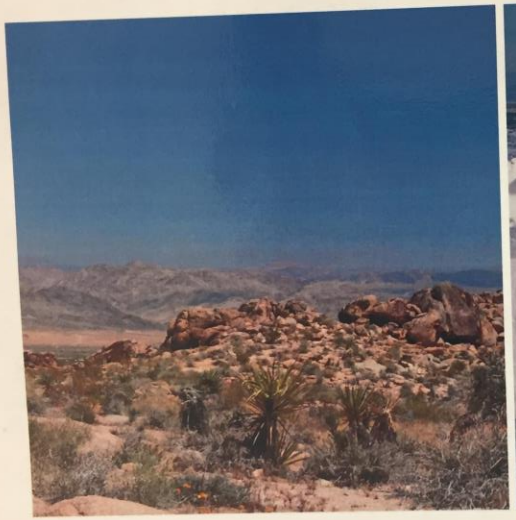
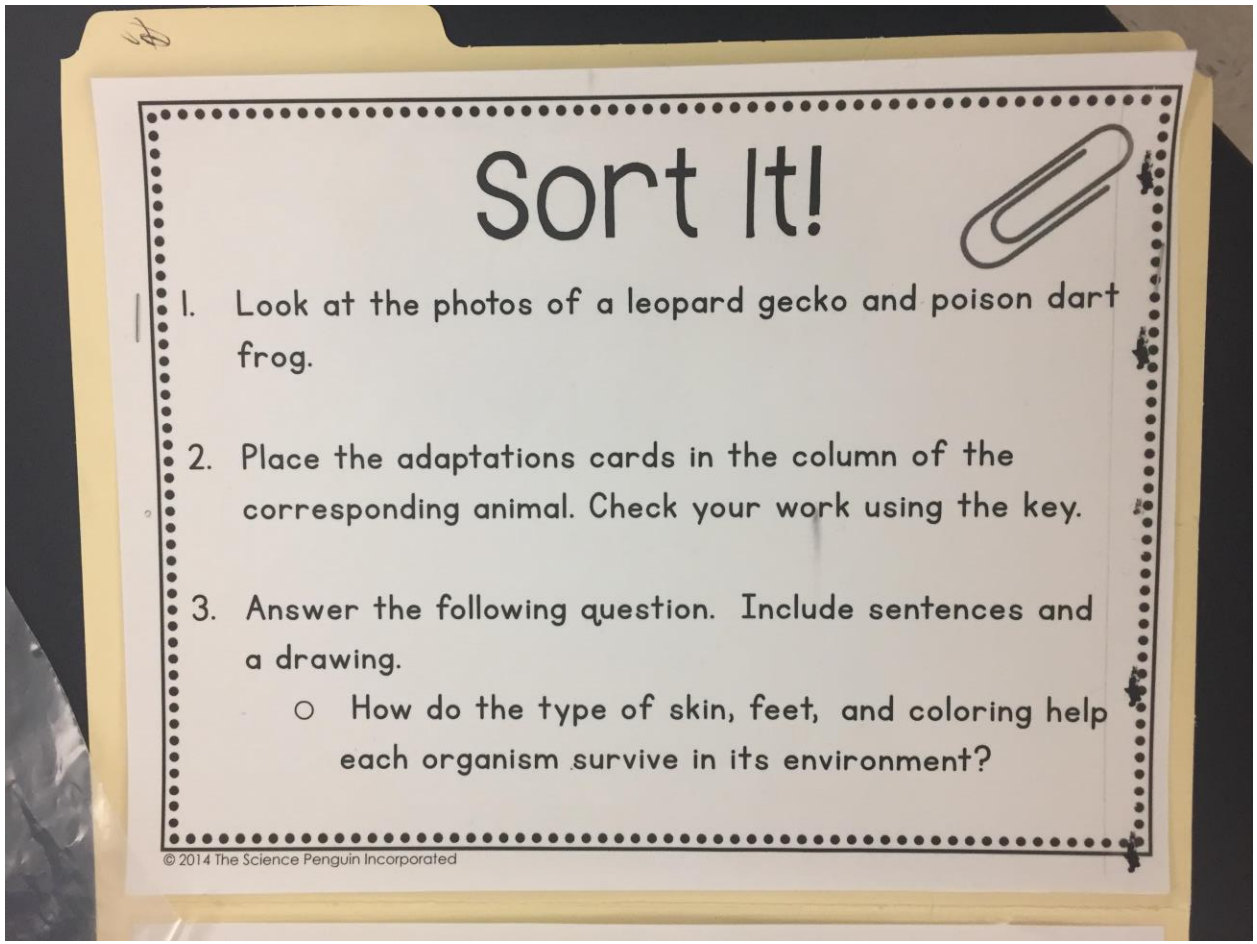
Match It! Feet Cards

Match It! Environment Cards

Match It! Environment Cards





Sort It!

1. Look at the photos of a leopard gecko and poison dart frog.

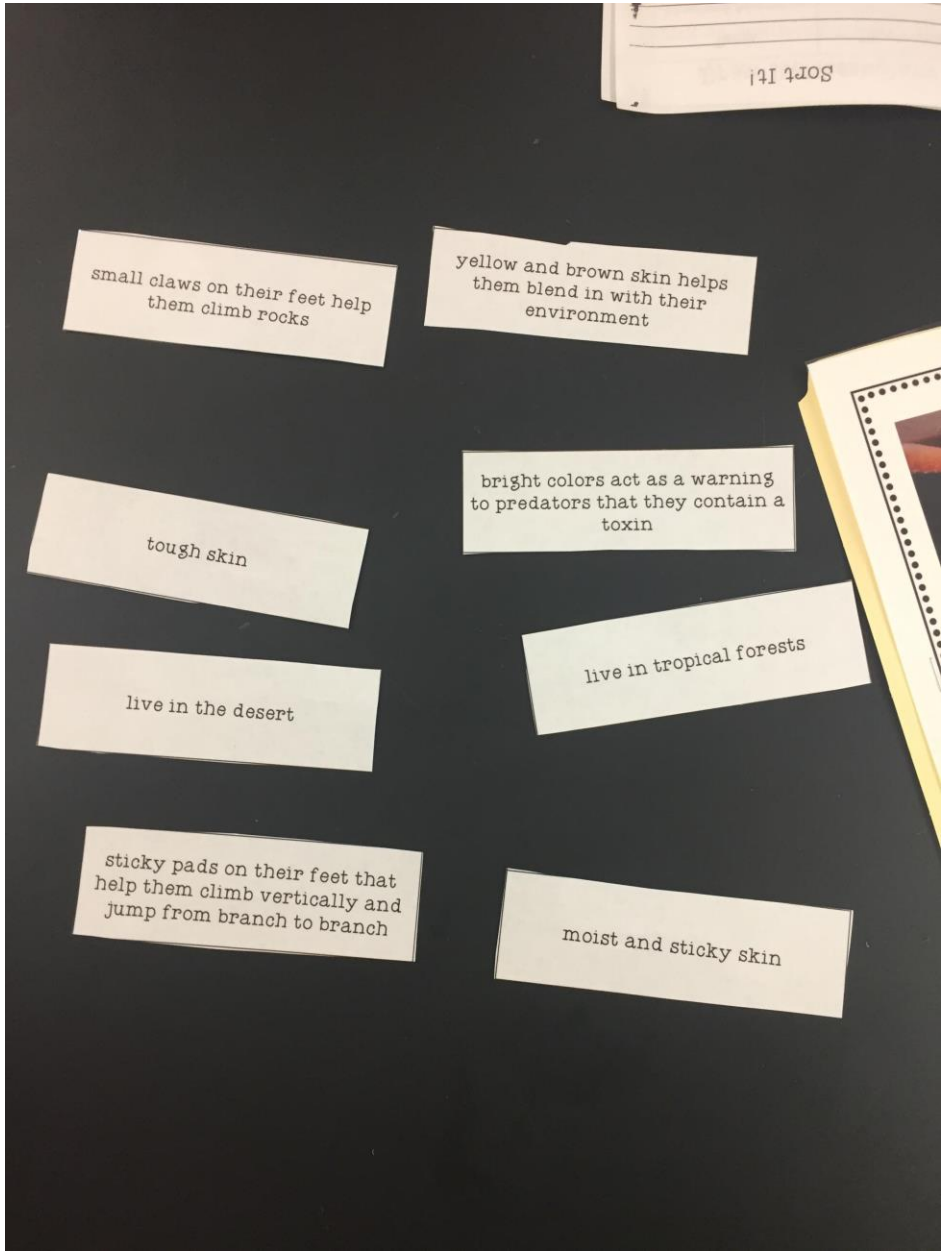
2. Place the adaptations cards in the column of the corresponding animal. Check your work using the key.

3. Answer the following question. Include sentences and a drawing.
   - How do the type of skin, feet, and coloring help each organism survive in its environment?

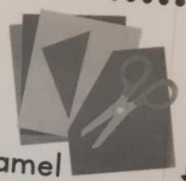
Animal Photos

poison dart frog

leopard gecko


Sort It!
small claws on their feet help them climb rocks
yellow and brown skin helps them blend in with their environment
bright colors act as a warning to predators that they contain a toxin
tough skin
live in tropical forests
live in the desert
sticky pads on their feet that help them climb vertically and jump from branch to branch
moist and sticky skin

Create It!



Use the supplies available to create a camel that could survive in the Arctic.

1. Read the information card about the camel.
2. Read the information card about the Arctic.
3. Draw a camel with the structural adaptations it would need to survive in the Arctic.
4. Label the structural adaptations you gave to the camel.
5. Explain why those adaptations would help a camel survive in the Arctic

survive in the Arctic

Camels

- live in hot deserts with sand
- herbivores
- pads on hooves keep camels from sinking into the sand
- hump on back stores fat so camels can survive for long periods of time without water or food
- thick eyelashes protect camels from having sand blow in their eyes
- long, strong legs that help them walk long distances

Arctic

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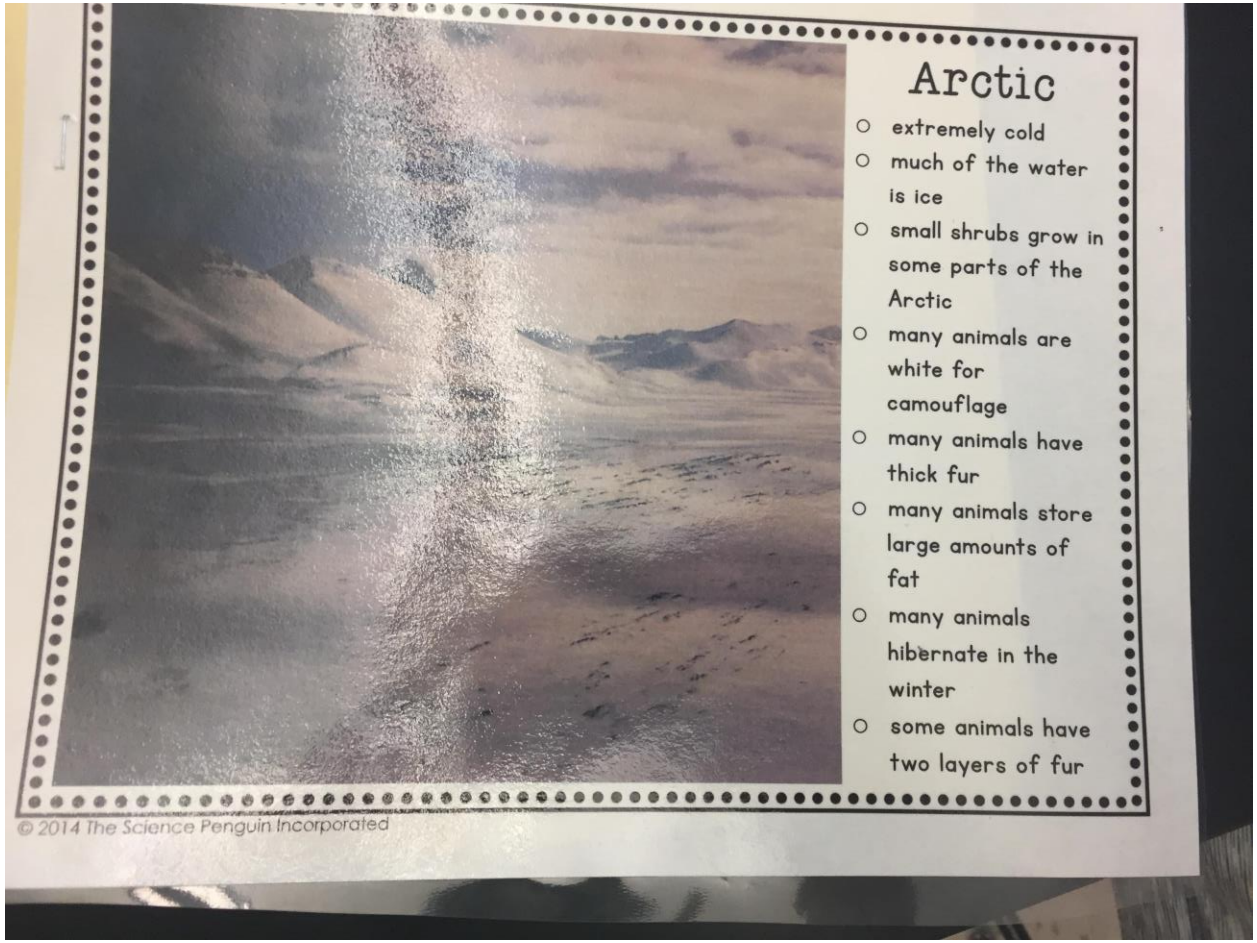

Arctic

- extremely cold
- much of the water is ice
- small shrubs grow in some parts of the Arctic
- many animals are white for camouflage
- many animals have thick fur
- many animals store large amounts of fat
- many animals hibernate in the winter
- some animals have two layers of fur