

Lesson 2: Adaptations

Objective:

1. Students will learn that different dinosaurs had different adaptations.

Materials:

- Class set of the **Document: Ceratopsians**
- Class set of the **Document: Dinosaur Matching Page**
- **Dinosaur PowerPoint** or printed picture
- Scissors and glue

Procedure:

1. Show the **Dinosaur PowerPoint** slide or printed pictures to the class. Ask your students to explain the adaptations Brachiosaurus, Tyrannosaurus rex, and Velociraptor had to make in order to survive in their environment. Brachiosaurus had a long neck so that it could reach leaves on trees. Both Tyrannosaurus rex and Velociraptor had sharp teeth, claws, and were fast to be able to catch its prey. The Velociraptor hunted in packs.
2. Distribute the **Document: Ceratopsians** to each student. Explain that they will read the passage to learn more about Triceratops. Ask students to read the adaptations and cut & paste the boxes corresponding to the appropriate body part.

Name: _____ Date: _____

Ceratopsians

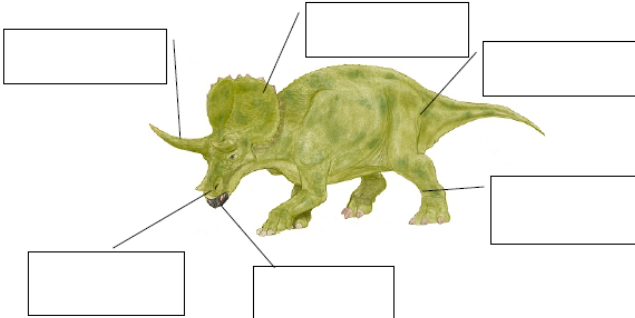
Ceratopsians were a group of herbivorous, beaked dinosaurs. They thrived in what are now known as North America, Europe, and Asia. They lived during the Cretaceous Period.

The earliest known Ceratopsian, a dinosaur named Yinlong, lived between 161.2 and 155.7 million years ago. The last Ceratopsian species became extinct at the end of the Cretaceous era-- 65.5 million years ago.

Early members of the Ceratopsian group, such as Psittacosaurus, were small and bipedal (they walked on two legs). Later members, including Triceratops, became large quadrupeds (they walked on four legs). Later members developed elaborate facial horns and frills extending over its neck. While these frills might have served to protect the vulnerable neck from predators, they may also have been used for display.

Ceratopsians ranged in size from 3 feet (1 meter) to over 30 feet (9 meters); some weighed as much as 12,000 pounds. They lived in herds and defended themselves with their horns and their sharp beaks.

Read about the adaptations in the boxes. Cut and paste them in the appropriate boxes.



sharp horns used to stab attacking dinosaurs

strong legs used to hold up its heavy body

flat teeth used to grind plants

a sharp beak to bite attacking dinosaurs







a bony frill to protect its neck or for display

very thick hide to protect it from bites

3. Distribute the **Document: Dinosaur Matching Page**. Instruct the students to read the descriptions and match the corresponding dinosaur with the descriptive paragraph.

Name: _____ Date: _____

Dinosaur Match- Read the Information boxes. Match the corresponding dinosaur with the content in the text. Fill in the blank by writing the name of the dinosaur.

1. _____		Velociraptor- Although this carnivore was smaller than a Tyrannosaurus rex, it was still very dangerous. It had sharp teeth and sharp claws; it was able to attack and kill larger dinosaurs.
2. _____		Triceratops- This herbivore used its horns to protect itself from carnivores like Tyrannosaurus rex. It had a frill made of bone that protected its neck.
3. _____		Herrerasaurus- This dinosaur was a carnivore. It had sharp teeth. It had three sharp claws on each of its hands. It was named after Victor Herrera.
4. _____		Brachiosaurus- It was an herbivore. In fact, it had a very long neck that helped it reach the leaves on tall trees. The front legs of this dinosaur were longer than the back legs.
5. _____		Stegosaurus- Its teeth were flat; this is evidence that it was an herbivore. When dinosaurs attacked the Stegosaurus, it used the four spikes on its tails to defend itself.
6. _____		Tyrannosaurus Rex- It had long and sharp teeth; this dinosaur was a carnivore. Although its arms were small, he was still a terrifying dinosaur.

Extension Ideas:

- Students can research dinosaurs using the internet or books. With the new information they have learned, they can create an informational poster, brochure, or PowerPoint presentation. Students can offer a presentation in small or large groups.