Distance Learning

Secrets of the Lost Quarry Answer Key

ACTIVITY 1

Styraco-Puzzle

Discussion

Styracosaurus is part of the ceratopsian family. What other dinosaurs do you think it is closely related to?

• *Triceratops* is the most well known relative, but there are also *Chasmosaurus*, *Torosaurus*, *Pachyrhinosaurus*, and *Centrosaurus*, among others.

What do you think this dinosaur ate? Why?

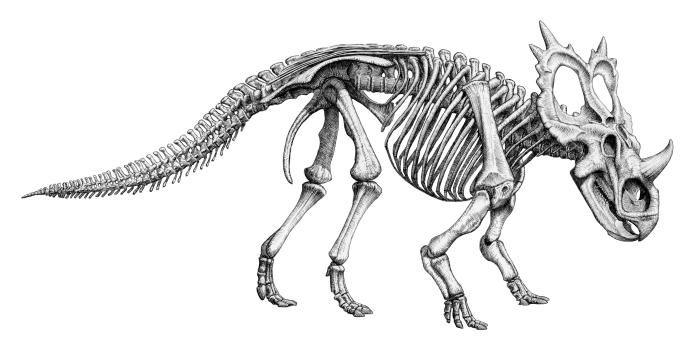
• Ceratopsians were herbivores. This is indicated primarily by their teeth, which are flat for shearing and grinding food.

Why would this dinosaur have a frill and horns? Why do humans NOT have these features?

• The horns and frills are thought to be both decorative, for attracting a mate, and for defence, in territorial or mating battles, and against predators.

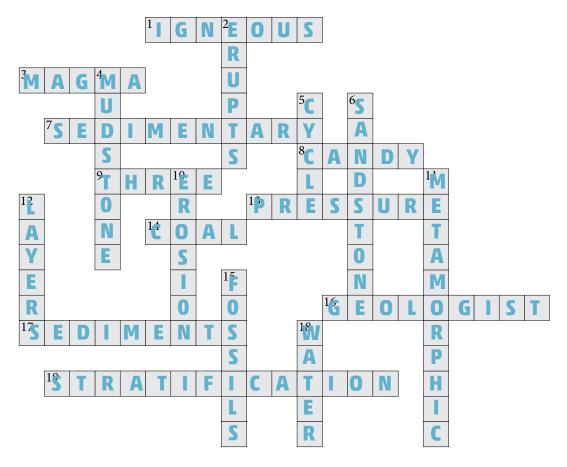
Ceratopsians are often found in bonebeds, which are mass graves of many individuals found together in the same layer of rock. What might cause this to happen?

• Natural disasters are thought to be the number one cause. Hurricanes and floods were common during the Mesozoic Era, and an inland sea covering much of North America only served to increase this risk. Animals could become caught up in a flood, and thousands of individuals may die at once. Then, after rotting and being picked apart by scavengers, they might become buried and fossilized.



ACTIVITY 2

Geology Crossword



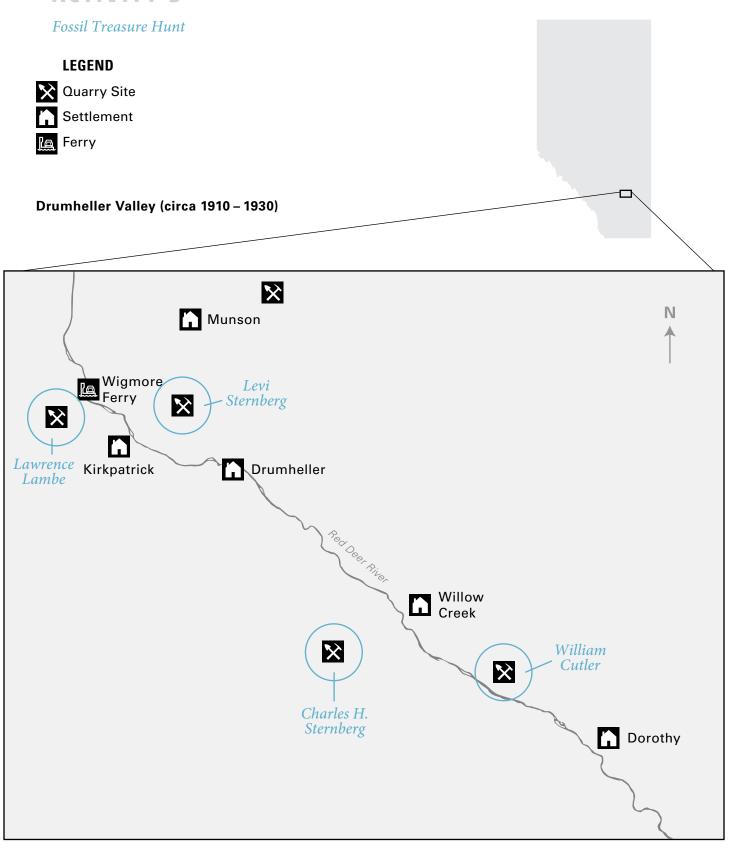
Across

- 1. The name of this basic rock type is derived from the Latin word 'fire'.
- 3. Molten rock under the surface of the Earth is called <u>magma</u>.
- 7. Fossils are usually found in <u>sedimentary</u> rocks.
- 8. Sweet treat that sometimes comes in 'rock' form.
- 9. There are three basic rock types.
- 13. Metamorphic rocks are formed by heat and pressure.
- 14. This sedimentary rock is a 'fossil fuel'.
- 16. A person who studies rocks and minerals is called a geologist.
- 17. Sedimentary rocks are made of tiny pieces called <u>sediments</u>.
- 19. Layers of sedimentary rock are referred to as stratification.

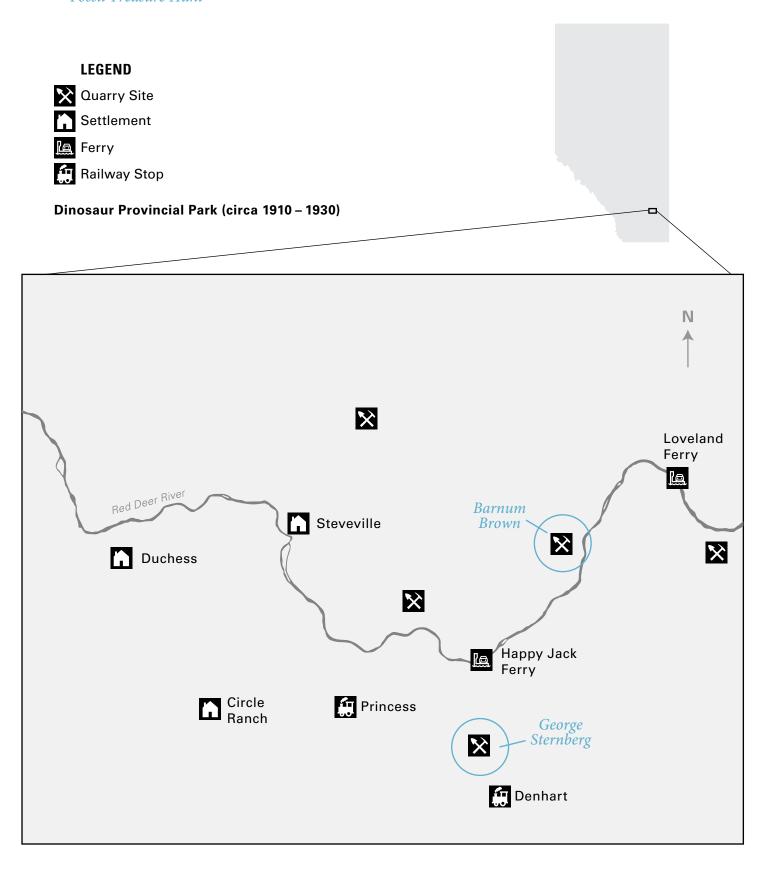
Down

- 2. When lava explodes from a volcano, we say that it <u>erupts</u>.
- 4. This sedimentary rock forms from mud.
- 5. Rock changing from one basic rock type to another is called the 'rock <u>cycle</u>.'
- 6. This sedimentary rock forms from sand.
- 10. Water, wind, ice, and heat break down rocks in a process called <u>erosion</u>.
- 11. The name of this basic rock type means "to change" or "to transform".
- 12. You can tell a hill is made of sedimentary rock because it has formed in <u>layers</u>.
- 15. Traces or remains of ancient life found inside rocks are called fossils.
- 18. Weathering of rocks is most often caused by <u>water</u>, wind, and ice.

ACTIVITY 3



Fossil Treasure Hunt





ACTIVITY 4

Additional Activities

Answers may vary.

Alberta