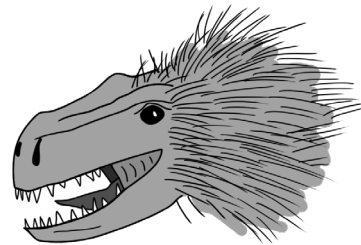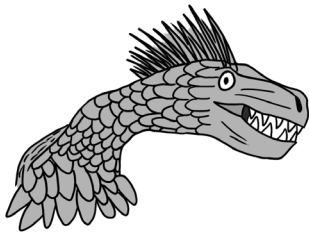# Camera Cretaceous

Colby Larrix is on his way to photography class when he trips and falls down the hill outside his school. If that isn't bad enough, he also falls through a time portal! Now Colby is trapped in the distant past with only his camera for company.

As you know, the faster you go through a time portal, the further back in time you travel. Most portals will send a person 12.2 million years back in time for every meter per second that they are traveling. Colby was going about 6.5 meters per second when he hit the time portal. How far back in time did Colby get transported?

Colby has landed in the Cretaceous! He wanders around for a while snapping pictures of various dinosaurs. There seem to be a lot of them. Colby has 144 exposures left on his memory card and is finding good opportunities to take pictures about every 1.5 minutes. How long will it take Colby to fill up his camera with awesome shots of dinosaurs? Express your answer in terms of hours and minutes.

Walking down a trail, Colby suddenly comes face to face with a Rugops! Fortunately for Colby, it is busy chowing down on a dead carcass and doesn't try to eat him. Colby gets some good pictures before moving away carefully. A Rugops can eat about 41kg of meat per day. If the carcass weights 1250 kg, how many days of meals can the Rugops get from it? Round your answer to the nearest day.

Colby is filming a herd of Parasaurolophus, when a Deinonychus attacks! The herd runs from the savage bird-like predator, and Colby runs with them! Colby can run 5.2 meters per second. The Deinonychus can run at 18.36 kilometers per hour. Is the Deinonychus going to catch Colby?

Colby trips and falls down a hill. As luck would have it, he goes back through the time portal at exactly the speed as he came in and winds up back at the school! The Deinonychus doesn't follow. It knows better than to mess with time travel nonsense. Unfortunately, Colby forgot to take the lens cap off, so all of his pictures are solid black. Oh well. Maybe he can write up the story for his English class.