Trilobites are extinct marine animals that swam and crawled around the ocean bottom for almost 300 million years. Trilobites first appeared during the Cambrian Period around 550 million years ago and went extinct 250 million years ago in the huge Permian mass extinction.

Trilobites are extinct arthropods – invertebrate animals with an exoskeleton (a skeleton or “shell” on the outside), a segmented body, and jointed appendages. Living arthropods – crabs, shrimp, lobsters, and insects, among others – are related to the extinct trilobites. The word *trilobite* means “three-lobed body” and refers to the three axial (short direction) sections across the trilobite’s body – one central ridge flanked by one wider section on each side. Trilobites also have three longitudinal (long direction) parts to their body. These parts are the *cephalon* (head), *thorax* (body), and the *pygidium* (tail).

Trilobites came in many shapes and sizes, ranging from a few centimeters to more than a half-meter (2 feet) long. Some trilobites had spines or bumps for protection. Trilobites were the first group of animals on Earth to have complex eyes!

Trilobites lived on the sea floor of Devonian Seas, along with horn corals, clams, brachiopods, and sea lilies. Several types of fishes swam above, including the armored *Dunkleosteus*. 
Make some Trilobite Cookies!

You’ll need:

- 1 bag of oval-shaped, ready-made cookies. Cookies that do not already have icing work best. Several shapes of cookies can be used if you want to show variety.
- 1 bag (8 oz.) of semi-sweet chocolate pieces
- 1 cup of M&M’s ® (mini-size works well) or other small candies for eyes
- Small microwave-safe bowl to melt the chocolate
- Wax paper
- Plates for cooling cookies

Recipe:

1. Lay out a sheet of wax paper on a plate.

2. Place the chocolate pieces in a microwave-safe bowl and melt them in the microwave, with help from an adult.

3. Take a cookie and carefully dip 1/6 to 1/3 of one end into the melted chocolate. This is the back end or “pygidium” of your trilobite. It is not important that the bottom of the cookie be coated, so if you want, you can just spread the melted chocolate on the top end of the cookie.

4. Carefully place the cookie on the wax paper. Do this for all of the cookies, or until about half of the chocolate is gone, whichever comes first. Don’t use up all the chocolate – you have another dipping to do!

5. Place the plate of cookies in the refrigerator to cool. The chocolate should become solid in 15-25 minutes. Then you’re ready for the second dipping. Take the cookies out of the refrigerator.

6. Separate the cookies from the wax paper. You may want to trim any excess chocolate drippings from the edges of your cookies.
7. Re-melt the remaining chocolate in the microwave, with help from an adult.

8. Dip the other end of each cookie in the chocolate. Be careful, because you’ll be holding the chocolate end, and it might be slippery. Dip about 1/3 to 1/2 of the end, so that this end has a slightly longer “chocolate dip” than the other end. This is the “cephalon” or head of your trilobite.

9. Place the twice-dipped cookie on another sheet of wax paper, on another plate.

10. Place two candies onto the “head part” of each cookie. Do the same for the rest of the cookies.

11. Place the finished cookies in the refrigerator and allow them to cool at least 15-20 minutes.

12. Eat and enjoy!

Color the critters of Devonian Seas

- Armor-plated fish Dunkleosteus
- "Lobe fish"
- "Shark" Cladoselache
- "Lung fish"
- "Horn" or rugosan Coral
- "Clam" Bivalve
- "Sea Lilies" Crinoids
- Trilobite Arthropod
- "Butterfly Shell" & "Lamp Shell" Brachiopods