

# Plasticene

## Narrative

Ht to Susan Freinkel, "Plastic a toxic love story"



11:40:00 PM on 14-April-1912 AD

HH:MM:SS DD:MM:YYYY

698446.4833

1912.2795

269m (882 ft)

50 MegaGrams (Tons)

2250 Passengers (1500 Deaths)

What did they find?

24 Motors

Steel, Ceramic, Gold

but not Plastic....



What do we dig up on Greek ruins?

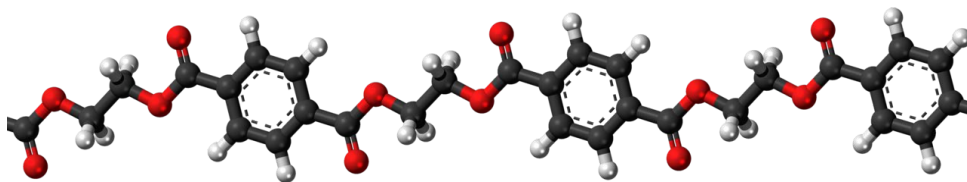
Why are the only human remains  
from Mummies?

Do we know what dinosaurs looked  
like? Latest swimming dinosaur.



**PETE: Polyethylene –[ polyester, shopping bags]**

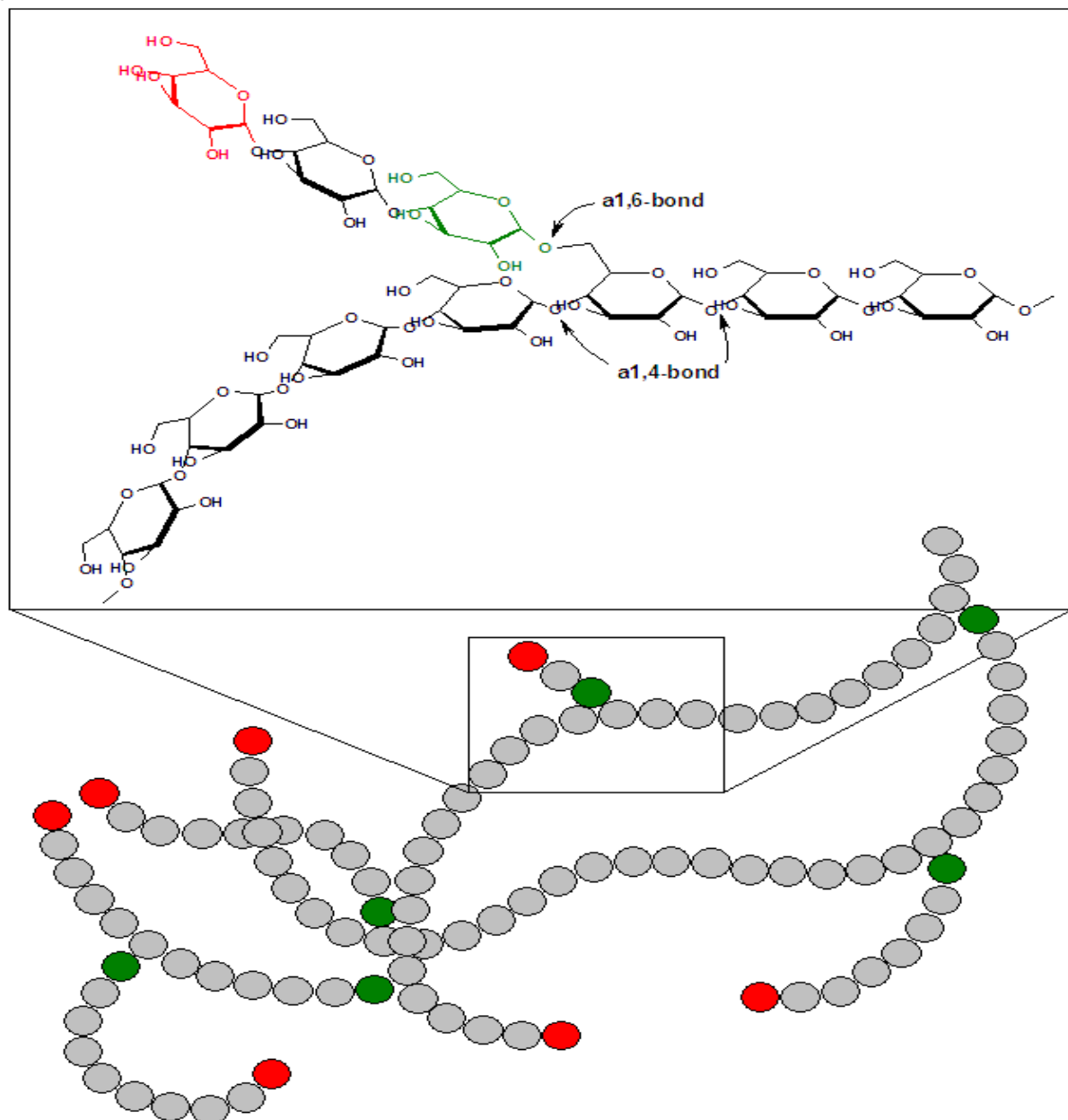
**Black=Carbon, White= Hydrogen, Red=Oxygen**



HDPE= High Density PETE [Outdoor furniture](#), siding, floor tiles, shower curtains

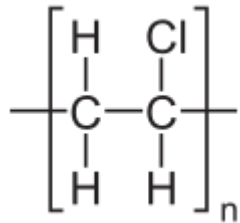
LDPE = Low Density PETE Detergent bottles, milk ugs, and molded plastic

j

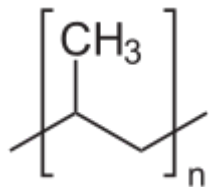


cases

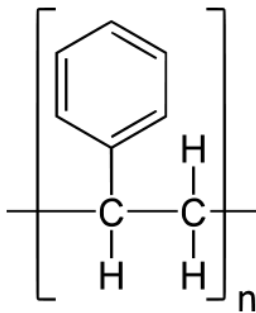
**V= PolyVinyl Chloride (PVC)**



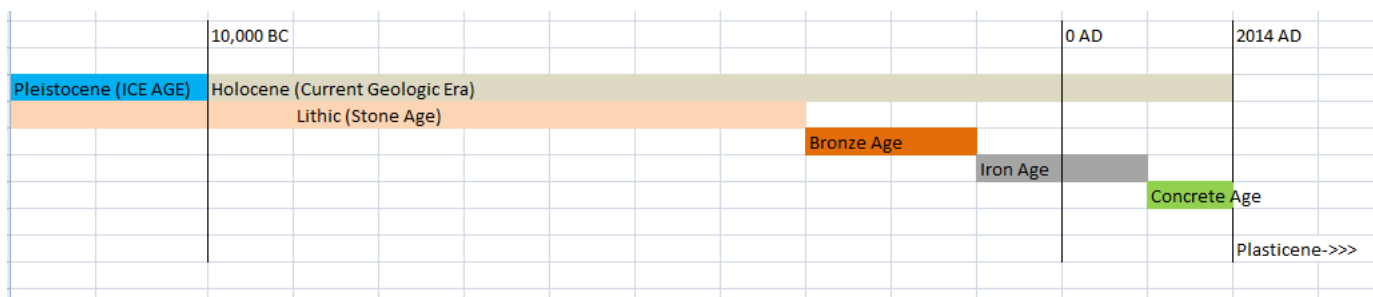
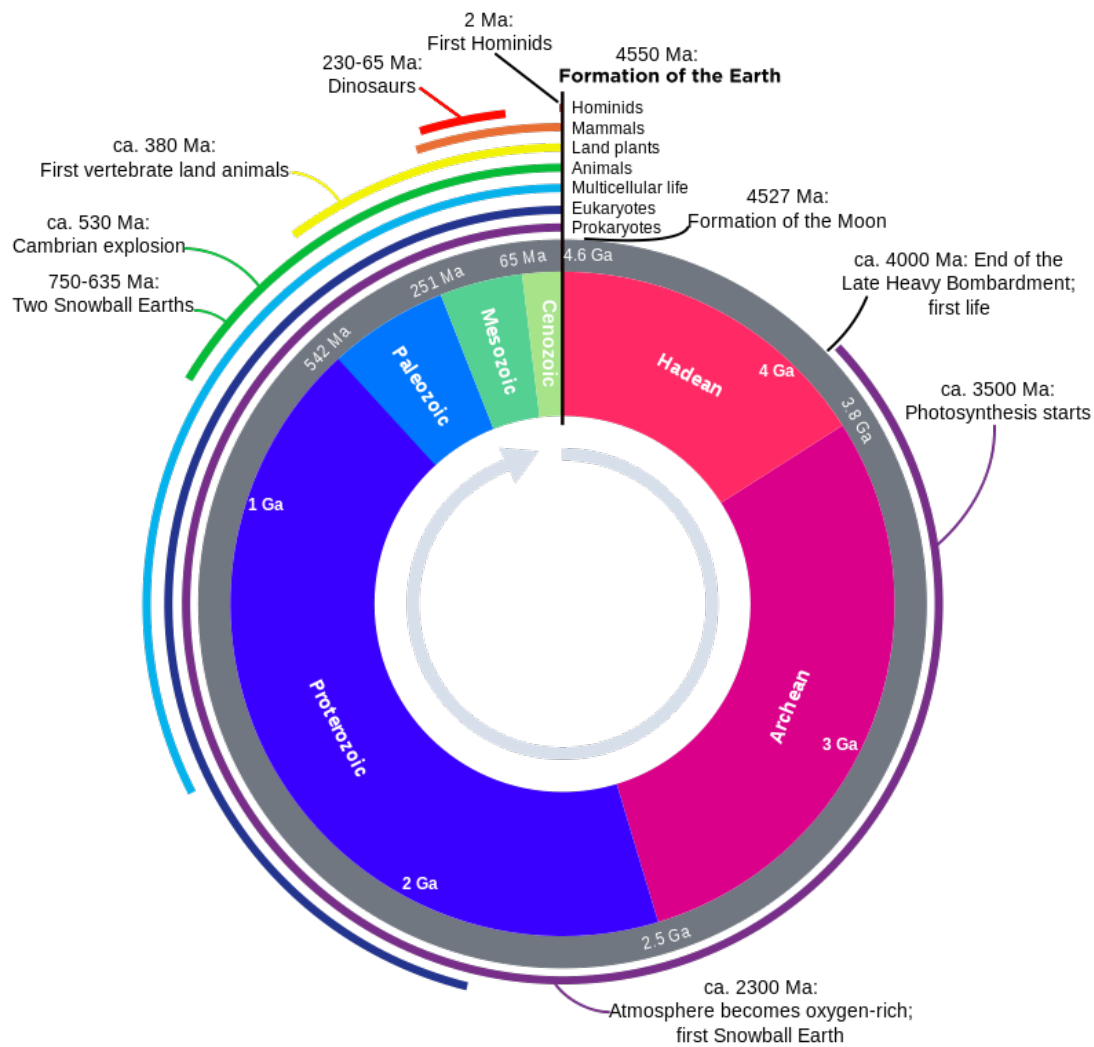
**PP = Polypropylene** (Bottle caps, drinking straws, yogurt containers, appliances, car fenders)



**PS = Polystyrene** (Packaging foam, food containers, plastic tableware, disposable cups, plates)



## Glossary



## Exercises

**polymerization** is a process of reacting monomermolecules together in a chemical reaction to form polymer chains or three-dimensional networks

Make Milk plastic- – the chemistry is the same.

1. Microwave glass of milk for 2 minutes.
2. Add 4 tablespoons of vinegar
3. Stir until solids form (polymerization).
4. Use cookie cutters
5. Dry for a couple days- and have a object of milk plastic.

Milk contains many molecules of a protein called casein. When milk is heated and combined with an acid, such as vinegar, the casein molecules unfold and reorganize into a long chain. Each casein molecule is a monomer and the chain of casein monomers is a polymer. The polymer can be scooped up and molded, which is why plastic made from milk is called casein plastic

Make Plastic from Styrofoam.

1. Add acetone to mason jar.
2. Stir in little bits of styrofoam. Melting into acetone
3. Wait 3-5 minutes, then with rubber gloves to form and object
4. Let dry overnight.

<https://www.youtube.com/watch?v=h9Jx8NRkWTo>