**Science behind the oven project-** First start by going over the science behind the experiments: Convection is the transfer of heat in water or air. This is why humans warm their hands over a fire. Radiation is the transfer of heat through the air. This is how you get sunburnt. Conduction is the transfer of heat through touch. This happens when you touch something hot. We then discuss which type of heat transfer the pizza box ovens use.

**Making the ovens-** This is rather simple and self explanatory. You will want to line the bottom of the box in black paper. Then place the smores (chocolate up) on a black plate in the box. Cover the top of the box in saran wrap and prop the lid up with some kabob sticks and tape. Set the boxes on top of a table or elevated surface (so the ants don’t get in it) and let it sit in the sun. Check often.

**Science behind the elephant toothpaste-** Explain the science the same way as the first project. This one is about reactions. The foam you made is special because each tiny foam bubble is filled with oxygen. The yeast acted as a catalyst (a helper) to remove the oxygen from the hydrogen peroxide. Since it did this very fast, it created lots and lots of bubbles. Did you notice the bottle got warm. Your experiment created a reaction called an Exothermic Reaction – that means it not only created foam, it created heat!

**Instructions for the volcanoes-** In a separate cup mix 3 tablespoons warm water and 1 packet yeast. Pour the ½ cup hydrogen peroxide to the main cup. Pour dish soap in the main cup, mix. Add the yeast water mixture!!