# Ocean Zones

Create a model of the layers of the ocean.

## Materials
- Large mason jar
- Vegetable oil
- Blue liquid dish soap
- Light corn syrup
- Rubbing alcohol
- Blue and black food coloring
- Masking tape
- Pen
- 5 Cups

## Procedure
- Place five strips of tape evenly up the side of the jar. Label them "Trench," "Abyss," "Midnight," "Twilight," and "Sunlight."
- Pour 3/4 cup of vegetable oil, corn syrup, dish soap, water, and rubbing alcohol each in different cups.
- Mix black food coloring with corn syrup and pour it into the bottom of the jar.
- Mix two drops of blue coloring with soap and pour in the jar.
- Mix blue coloring with water until it is a little bit lighter than the soap and pour into the jar.
- Mix oil with blue coloring until it is a little bit lighter than the water and pour into the jar.
- Mix rubbing alcohol with a very small drop of blue food coloring until it is just slightly blue and pour into the jar.
- Discuss the physical conditions of each layer as you pour them in and the creatures that could live in them.

## Results
You made a model of the layers of the ocean!

## Why?
The ocean has the most light and warmth and the least pressure at the surface. The light and warmth drop the further you go down, until the water is freezing temperature and there is no light whatsoever. The pressure also increases as you go deeper, as there is more and more water above you. Sea creatures have to develop very special adaptations to survive in deeper levels. Many of the creatures in the deepest parts of the ocean aren't even known to us, as it's very difficult to explore the deepest parts of the ocean.

To learn more about earth science, check out the Restless Earth exhibit at the Pink Palace Museum.