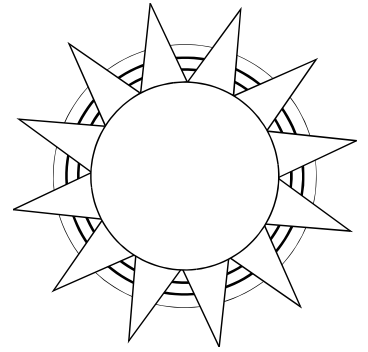


## EARTHMALLOW MODELS



**Purpose:** (1) To create a model of the Earth that shows day and night during different seasons.

### Materials:

Marshmallows (3)

2 different colors of

Food coloring

Muffin cps

Lamp

Toothpicks

Orange drink mix

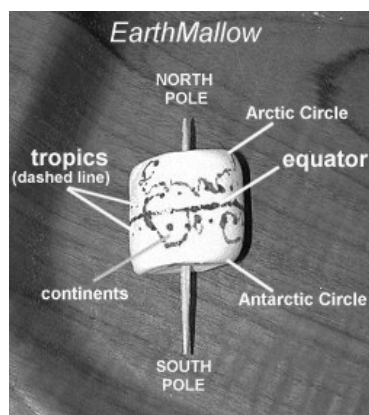
Chocolate Powder

Trays

Globe

### Procedure:

1. Use the tray as a place mat.
2. Stick a toothpick through a marshmallow from one flat side to the other. The flat rims represent the Arctic and Antarctic Circles.
3. Use another toothpick as a "paintbrush" to paint the Equator on the marshmallow model with food coloring.
4. Use a different color of food coloring to paint on the Tropic of Cancer and the Tropic of Capricorn.
5. Examine a globe carefully. Try to draw the continents on your model. Concentrate on where most of the land really is located.



6. Take your model and circle it around the lamp (our model sun). Since the Earth has a  $23\frac{1}{2}$  degree tilt, tilt your model toward the windows the entire time you are circling the sun. Make careful observations about when it is daytime and when it is night.
7. In the winter, the North Pole has night for the entire season, while the South Pole has day. Use chocolate powder for night and orange drink mix for day and make another model showing day and night on the Earth during the winter season. Raise your hand to have your teacher check your model. \_\_\_\_\_

**Analysis:**

1. Draw diagrams that represent day and night on Earth during the summer, spring, and fall. Label your diagrams. Explain your reasoning for each diagram.

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2. Explain the advantages and disadvantages of using models.

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