

SOLAR RAYS – HELPFUL OR HARMFUL? - DATA SHEET

I. Pocket Temperatures

Which color pocket do you predict will get the warmest, stay the coolest?

Warmest:

Coolest:

Color of pocket

Temperature after 15 min

Blue

White

Red

Black

List the color pockets from warmest to coolest. Is this what you predicted?

II. UV light – Record which beads changed colors due to UV light, if you can, note how strong the color change was.

Sunlight alone:

Is your body naturally protected from UV light?

Shade:

Are you protected from all UV light in the shade?

Sunlight and water:

Are you protected when under water in a pool?

Sunlight and cloth:

Are you protected under your clothes?

Sunlight and sunglasses:

Are your eyes protected with sunglasses?

Sunlight and sunscreen:

Are you protected with sunscreen?

Sunlight and a container:

Are you protected behind a glass or plastic window?

III. Shady Areas – Describe the areas as to how much shade is in them in the following chart.

Which area do you predict will be the coolest? The hottest?

Area Description

Temperature

1.

2.

3.

4.

5.

How did your results compare to your predictions? How does this experiment help support the fact that the sun's rays provide the heat and light on earth?