

Name:

# **Experiment 2: UV protection from material**

Different types of material allow in different amounts of ultraviolet radiation. Open-weave material will let in more ultraviolet radiation than closed- weave material.

## Aim

To test different materials to see if closed-weave materials block out more light than open- weave materials.

## **Hypothesis**

UV beads will change colour when covered with open-weave material.

The independent variable is the type of material the dependent variable is changing colour.

### **Materials**

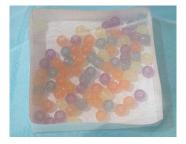
- UV beads
- three pieces of different materials the same size (choose different weaves)
- four containers with the same number of beads in each

#### **Steps**

- 1. Place equal number of beads into the same type of container
- 2. Cover three with different types of material
- 3. Leave the fourth container uncovered as a control
- 4. Place the beads covered with material in the sunlight (make sure that they are all getting the same amount of sun)
- 5. After one minute check to see if the UV beads have changed colour.

### **Results**

Record your results. (Digital photographs are a good way of recording the results.)



## Conclusion

Open-weave materials let ultraviolet light through while closed-weave materials do not let ultraviolet light through.