38. TEMPERATURES IN THE DESERT

Overview: This activity will give students opportunities to take temperature readings and make comparisons.

Objective: Using thermometers, students will observe, record and graph differences in temperature between full sun and shaded locations.

Time needed: 1 hour

Group Size: 2-4 (younger students will need an adult with each group)

Age appropriateness: any

Site: Selected shady and sunny locations in the Garden.

Background: Temperatures can vary within several feet from shaded to sunny areas. Also, height from ground level can show temperature variations.

Materials:

Provided at the Garden

Thermometers

Clipboards

Provided by the classroom teacher

Pencils

Temperature recording charts

Garden maps

Graph paper

Preparation: Make copies of graph paper, charts and maps.

Pre Activity: Provide practice reading thermometers and how to handle them appropriately. Basic bar graph construction needs to be taught.

Procedure:

- 1. Give each group a thermometer, recording chart and map locations.
- 2. Place the thermometer in the sun and in the shade in each location marked on the map.
- 3. Record all temperatures and the location where the information was gathered.
- 4. When the groups have gathered all data, they need to construct bar graphs.
- 5. Hold a class discussion about where were the hottest, coolest places. What was the greatest temperature difference recorded? Is there a difference in the time of day the temperatures were taken?

Modifications: Younger students may need a pre-tour to locate temperature reading sites. Graphs can be made back at school.

Extensions: If group is in the Garden for an extended period of time, take readings in the morning and in the afternoon. Make predictions prior to reading thermometers. Discuss animal migrations.

Reference List:

Hot Water and Warm Homes From Sunlight, GEMS

Time of Year: any

**This activity was adapted from <u>Hot Water and Warm Homes From Sunlight</u>.