Teacher Sheet 1

CRITICAL THINKING ACTIVITY:
GETTING TO KNOW SUNSPOTS

OBJECTIVES: Students will:

- Read about and discuss the history of sunspot research and observation
- Plot the locations of sunspots by latitude and longitude
- Recognize the pattern in sunspot location that occurs as a result of heat transfer and the rotation of the Sun.

MATERIALS:

- ✓ **Student Sheets**
- ✓ Data Table of Sunspot Locations
- ✓ Sunspot Location Grid
- ✓ Paper and pencil

PROCEDURE:

1. Read the text, **GETTING TO KNOW SUNSPOTS,** with the class.
   - ✓ Review latitude and longitude.
   - ✓ Be sure students understand what a "cycle" is.

2. Students should refer to the data tables of sunspot locations.
   - ✓ Locate each of the sunspots on the grid of the Sun's surface and place a dot where it belongs.
   - ✓ When all the dots have been located on the grid, connect the dots with a colored pencil and then color in the area inside the dots.

3. Students should now complete the **ANALYSIS** section.

EXTENSIONS:

- Create a model of the sun's surface showing the location of sunspots from the poles to the equator;
- Research some of the technology used by scientists today to study the Sun and report back to you class.