

## Indoor Practice: Setting up a Star Pattern for Measuring Soil Moisture

### Introduction

In this activity, students will learn how to set up a sample site to collect soil moisture data. (Inside, where it's warm and dry!)

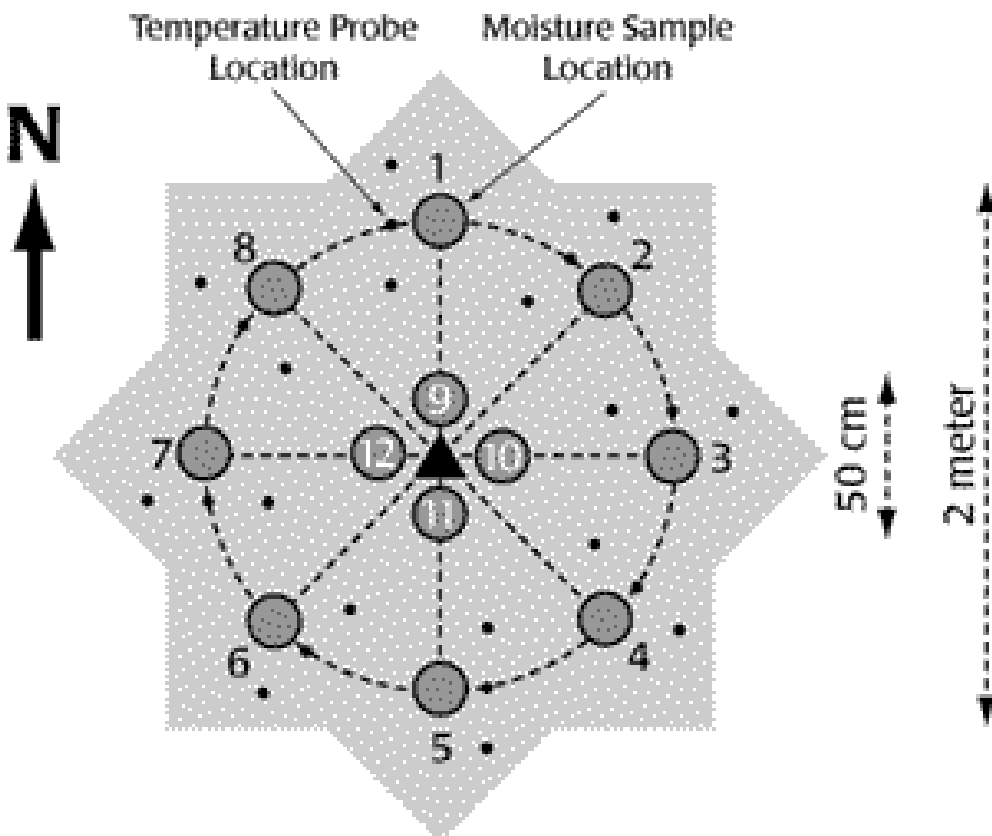
### Materials (per group of 2-4 students)

Compass  
Meter stick  
Low-stick masking tape if working on floor, or  
Chalk, if working on black lab tables

### Setting up a Star Pattern

[Measurements will be taken in a star-shaped pattern with samples collected each time at different locations on the star. ]

Layout a simple star two meters in diameter by using a meter stick and compass to locate four points one meter north, south, east and west from a central reference marker. Locate four more points halfway between these points along an imaginary circle connecting these points. You now have eight points on your star. Four more points should be located 25 cm from the reference marker along the north - south, east - west lines.



Name \_\_\_\_\_

Hour \_\_\_\_\_ Date \_\_\_\_\_

### **SCORING GUIDE FOR STAR PATTERN**

- |  |     |
|--|-----|
| 1. Center point labeled  | 1pt |
| 2. Points 1-12 labeled   | 5pt |
| 3. Point # 1 due north;<br>exactly 1 meter from center point   | 2pt |
| 4. Point # 5 due south;<br>exactly 1 meter from center point   | 2pt |
| 5. Point # 3 due east;<br>exactly 1 meter from center point  | 2pt |
| 6. Point # 7 due west;<br>exactly 1 meter from center point  | 2pt |
| 7. Points 2, 4, 6, & 8 midway between<br>adjoining points and 1 meter from<br>center point                 | 2pt |
| 8. Points 9, 10, 11, 12 adjacent to center<br>point and due north, east, south , and<br>west, respectively | 2pt |