Instructions: Pick a sunny day to observe the sun’s movement in the sky.

1. Take students outside and have them stand in a particular spot (the spot needs to be the same for all 3 trials).
2. Tell students to stretch one arm out straight with their elbow locked.
3. Have students move their hand one hand position until they read the sun’s spot in the sky. (Record how many times they had to move their hand)
4. Then measure how long the shadow is of a particular object. Record the length. (Be sure to measure the same object in the same spot each time.)
5. Draw a picture of the shadow.
6. Repeat the process for 3 different times during the day.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Observations of the Sun

|  |  |  |  |
| --- | --- | --- | --- |
| Morning | \_\_\_\_\_\_\_\_\_\_\_\_\_  Handspans | \_\_\_\_\_\_\_\_\_\_\_\_\_  Shadow Length | Drawing |
| Mid-day | \_\_\_\_\_\_\_\_\_\_\_\_\_  Handspans | \_\_\_\_\_\_\_\_\_\_\_\_\_  Shadow Length | Drawing |
| Later Afternoon | \_\_\_\_\_\_\_\_\_\_\_\_\_  Handspans | \_\_\_\_\_\_\_\_\_\_\_\_\_  Shadow Length | Drawing |

Sun, Moon and Earth’s Position

Instructions:

1. Have students sit in a circle on the rug.
2. Place 3 different sized balls in the middle of the circle, 1 to represent the Earth, 1 to be the Sun and 1 to be the Moon. (The balls should be relative to their size. Ie. The Sun should be the biggest).
3. Have students predict which ball represents what.
4. Discuss with students how the Earth rotates around the Sun and the Moon rotates around the Earth.
5. Have students hold a ball and demonstrate how they rotate in respect to each other.