Your shadow will appear when you are outside in the sun. Have you noticed that your shadow sometimes looks tall and sometimes looks small?

## Try this activity with a partner on a sunny day:



1) Select a concrete area in the sun.
2) Use chalk to mark a spot to stand on. (Have your partner trace around your feet to ensure that you stand in the exact same spot every time you repeat this experiment.)
3) Have your partner trace around your shadow on the concrete. Label the shadow with the time of day and take note of the direction of the sunlight. Measure the length of the shadow.
4) Now trace around your partner's shadow in a different spot on the concrete.

Repeat this experiment at different times of the day: Early Morning, mid morning, midday and afternoon.


Compare the shadow outlines:

| Shadow 1 | Shadow 2 | Shadow 3 | Shadow 4 |
| :--- | :--- | :--- | :--- |
| Time of day: <br> Length and direction <br> of shadow: | Time of day: <br> Length and direction <br> of shadow: | Time of day: <br> Length and direction <br> of shadow: | Lime of day: <br> Length and direction <br> of shadow: |
|  |  |  |  |

How did the Sun's location affect your shadow:

