

# Shadow Length Measurement Worksheet

Instructions: Use the flashlight to simulate the sun by holding it at different heights and distances from the shadow stick on your sun clock. Record the shadow lengths in the table below. Then, calculate the differences in shadow lengths for different heights and distances. Finally, analyze your findings to identify patterns.

Flashlight Height (cm)	Flashlight Distance (cm)	Shadow Length (cm)	Difference (cm)

## Analysis Questions:

1. How does changing the height of the flashlight affect the shadow length?
2. How does changing the distance of the flashlight affect the shadow length?
3. What patterns can you observe in the shadow lengths based on your measurements?
4. How might this activity relate to the shadow changes during the Winter Solstice?