

Shadow Shifts

Answer Key

Name: _____

Date: _____

Vocabulary

Shadow - an area of darkness caused by light being blocked by something

Activity 1

Measure the lengths of each shadow using the Ari distance app and a hand as a marker to note the end of the shadow.



(Answers will vary based on water bottle size.)

7 inches

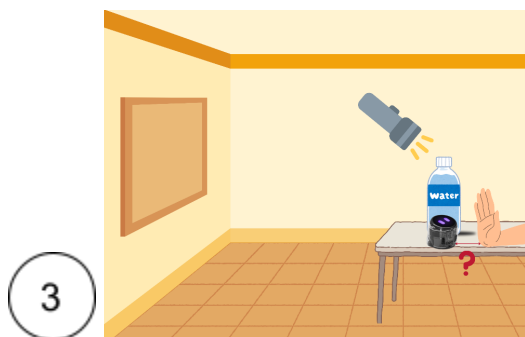
9 o'clock Shadow Length



(Answers will vary based on water bottle size.)

5 inches

10 o'clock Shadow Length



(Answers will vary based on water bottle size.)

3 inches

11 o'clock Shadow Length

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Activity 2

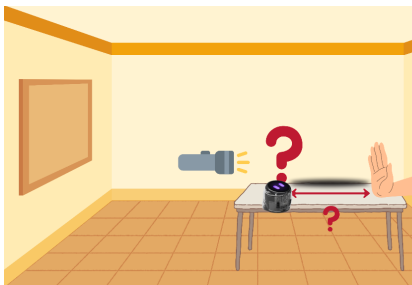
Choose another object to measure its 9 o'clock, 10 o'clock, and 11 o'clock shadows. Record the object and the length of its shadows below.

1

Chosen Object Name:

book

2

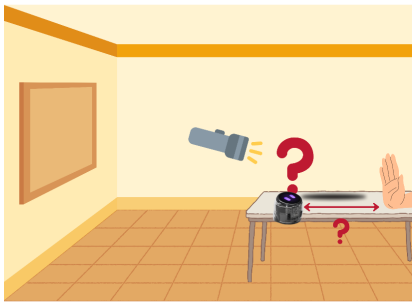


(Answers will vary based on object size.)

10 inches

9 o'clock Shadow Length

3

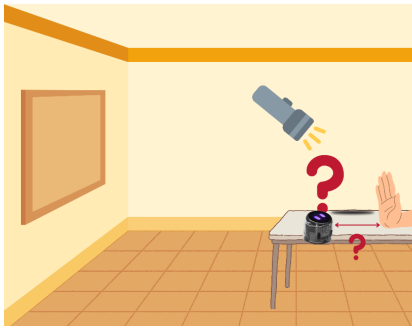


(Answers will vary based on object size.)

8 inches

10 o'clock Shadow Length

4



(Answers will vary based on object size.)

5 inches

11 o'clock Shadow Length

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Exit Ticket

Please respond to the following prompts.

1. Question 1: How did the shadow length change as the flashlight moved to different clock positions? **The length of the shadow became smaller and smaller as the light source moved closer to the 12 o'clock time position.**
2. Question 2: At what time of day would an object's shadow be the longest? **I predict that an object's shadow would be the longest either around sunrise or sunset when the light source is closest to the ground or the horizon.**