

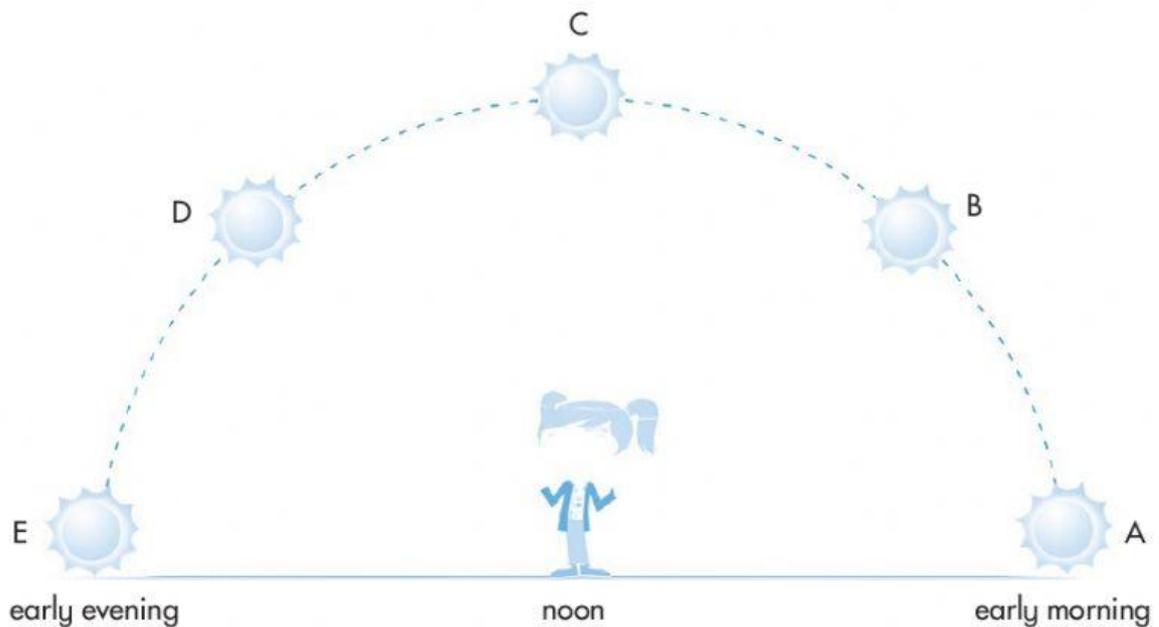
Worksheet 4

Does the Sun Move in the Sky?

Aim: To observe how the Sun appears to move in the sky and relate it to the spinning of the Earth

Skills: Observing, identifying, communicating

A, B, C, D and E are different positions of the Sun in the sky during the day.



- 1 From A to B, the Sun appears to move _____
(higher / lower) in the sky.
- 2 From D to E, the Sun appears to move _____
(higher / lower) in the sky.

3 The position of the Sun is the highest at _____
(A / B / C / D / E) when it is _____
(in the early morning / around noon / in the early evening).

4 Which of these is caused by the spinning of the Earth?
Tick (✓) the correct answers.

The cycle of day and night

The Sun giving off light

The Sun appearing to move across the sky during
the day

The stars shining at night

Worksheet 5

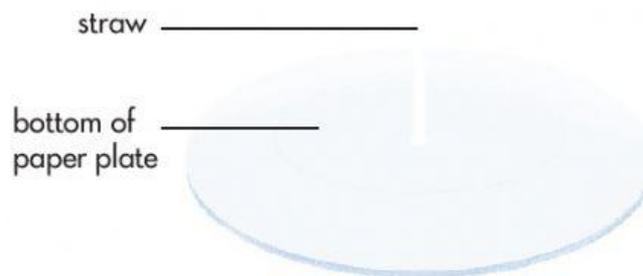
Changing Shadows

Aim: To find out how the shadow of a straw changes as the position of the light source changes

Skills: Observing, communicating, comparing, predicting, verifying

What you need: Paper plate, straw, sticky tape, flashlight

- 1 Flip over a paper plate. The bottom of the paper plate should face up.
- 2 Make a hole in the centre of the paper plate. Stick a straw through the hole in the paper plate.



You can use sticky tape to hold the straw in place.



- 3 Switch off the lights in the room. Switch on the flashlight.

- 4 Shine the flashlight at the straw from the right. Observe the position and size of the shadow of the straw.



- 5 Draw the shadow on the diagram in step 4.
- 6 Shine the flashlight from above the straw. Observe the position and size of the shadow of the straw.



- 7 Draw the shadow on the diagram in step 6.

Compare this shadow with the shadow in step 4.

The shadow _____ (is / is not) at the same position as the shadow in step 4.

The shadow is _____ (shorter / longer) than the shadow in step 4.

- 8 What do you think you will observe if the flashlight shines at the straw from the left?



The shadow will _____ (be / not be) at the same position as the shadow in step 6.

The shadow will be _____ (longer / shorter) than the shadow in step 6.

- 9 Now, shine the flashlight at the straw from the left. Observe the position and size of the shadow of the straw.
- 10 Draw the shadow on the diagram in step 8.

Compare this shadow with the shadow in step 6.

The shadow _____ (is / is not) at the same position as the shadow in step 6.

The shadow is _____ (longer / shorter) than the shadow in step 6.