Unit 3 – Light and Shadow
Revision for Unit Test
Grade 2 - Stage 3 Cambridge Primary Science

Name: _____ Class: _____ Date: _____

1. Aiko collected some objects.

pencil **glass** **tissue paper** **window** **ice cube** **coat**

a. Describe how she uses a light to sort the objects into the three groups by arranging the steps below. **Number 1 has been done for you.** [1]

_____1. Observe if the light went through, blocked or scattered.

__1__2. Turn the torch on shining on a white wall.

_____3. Put each object in the path of light.

b. Below are her observations.

Glass and window let light through.

Ice cubes and tissue paper scatter the light.

Pencil and coat block the light.

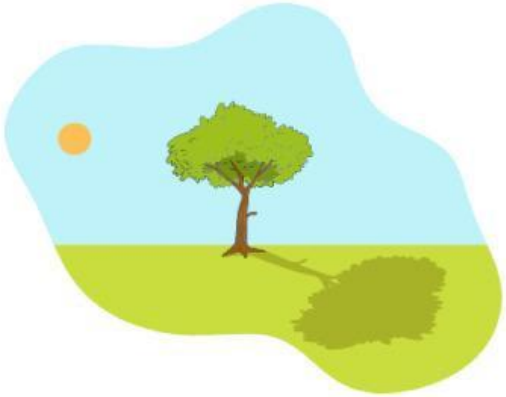
c. Below is her table of results. Write the name of each group in the box. [2]

opaque **transparent** **translucent**

glass window	ice cube tissue paper	pencil coat

LIVEWORKSHEETS

2. Look at the picture below.



a. Complete the sentence. [1]

The tree is an opaque object. It _____ the light of the sun and casts a shadow.

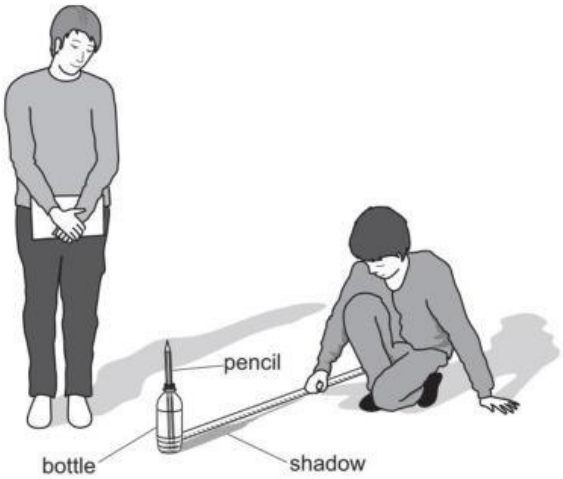
b. Draw the shadow of the tree at 12 noon. [1]

3. Hassan and Chen investigate shadows.

They put a pencil in a bottle outside in the sunshine. The pencil in the bottle forms a shadow.

They measure the length of the shadow every hour, starting at 9.00 in the morning.

Here are their results.



time of day	length of shadow in .....
9.00	21
10.00	11
11.00	1
12.00	10
1.00	21
2.00	32
3.00	53

a. Hassan and Chen have **not** put the units for the length of the shadow in the table.
Write down the units for length in the table. [1]

b. Write down the time of day when the shadow is the longest. [1]

_____

c. Hassan starts to write an explanation of their results.
Complete his conclusion. [1]

The length of the shadow changes during the day because _____

_____.

LIVEWORKSHEETS

4. Noah wants to find out what happens to a shadow when he moves a flashlight closer to and farther from an object.

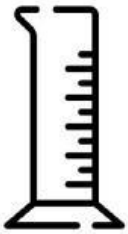
a. Write a prediction by completing the sentence below. [1]

The shadow gets _____ when the flashlight is moved closer to the object.

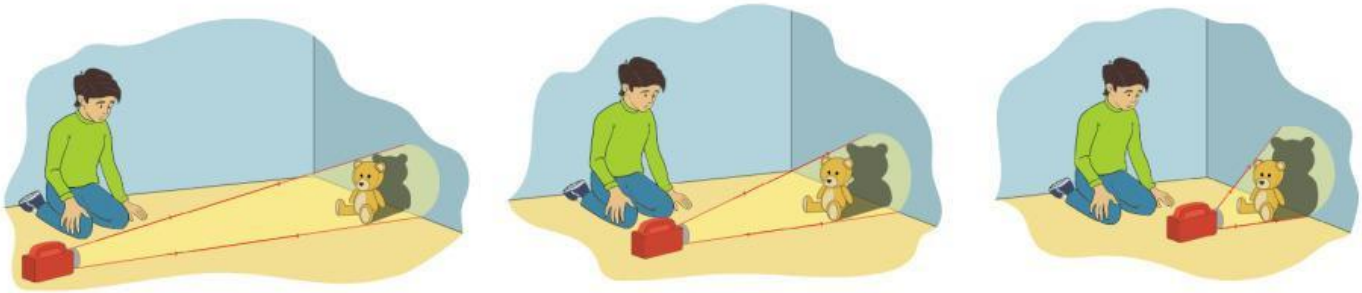
b. What safety reminder he needs to observe while using the flashlight? [1]

_____

c. Choose the correct equipment he needs to use to measure the height of the shadow. [1]



d. Below is the result of his experiement.



Look at the size of the shadow of the object above. Is your prediction correct? Why?

_____ because _____

_____.

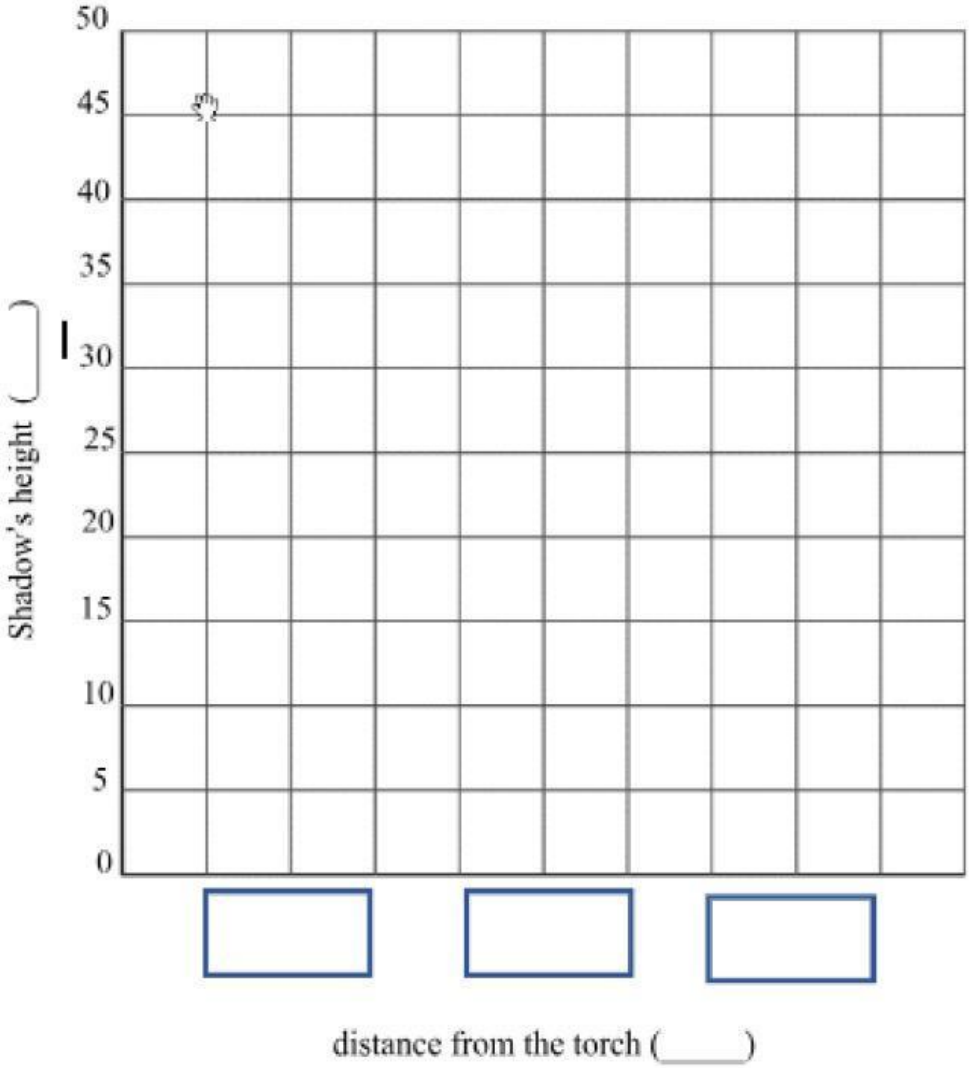
LIVEWORKSHEETS

e. He listed the result of his investigation in a table.

	distance of the torch from the object (cm)		
	30	**20**	**10**
size of shadow (m)	**20**	**32**	**45**

Noah spotted a problem in one of the data from the table. Circle the wrong information. [1]

f. Make a bar graph below. [3]



g. Describe the pattern that you observe in the bar chart. [1]

The size of the shadow gets _____.

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