Pakistan Urdu School - Kingdom of Bahrain
Section: Senior
Subject: G. Science

Student Name: _____ **Subject: _____**
Class/Section: VIII/_____ **Date: _____**

Ch. # 11	Work Sheet - 01	Page – 01 to 03

SECTION – A

Q No. 1 – Mark the correct option. Each question carries 01 mark. Cutting or double option does not award any marks. Use of any chemical would consider wrong answer.

(1) The image produced by a concave lens is:
(A) always virtual and enlarged (B) always real
(C) always virtual and reduced in size (D) sometimes real, sometimes virtual

(2) A cricketer loses the sight of one eye in a car crash. The other eye is not affected. When he plays cricket again, the effect will be:
(A) He can see the ball only half the time (B) He cannot focus on the ball.
(C) He cannot judge how far away the ball is (D) The ball looks smaller.

(3) When light enters the eye and falls on the retina it produces chemical changes in the retina. The result of this is that:
(A) the pupil of the eye gets larger (B) electrical signals are sent to the brain
(C) the iris changes colour (D) the lens becomes more curved

(4) A girl walks through a grassy field looking for some flowers. She finds none until she bends down to tie her shoelace and discovers that there are hundreds around her. She picks a bunch of blue flowers but misses the similar red ones growing around them. This shows that she is:
(A) long-sighted (B) short-sighted
(C) long-sighted and colour blind (D) short-sighted and colour blind

(5) In the eyes of a short-sighted person, light rays coming from a distant object are brought to focus in front of the retina. Short-sightedness can be corrected by a:
(A) concave lens (B) convex lens
(C) circular lens (D) telephoto lens

SECTION – B

a) Complete the following sentences using the words in the box below. You may need to use one or two words more than once.

convex	focal	thinner	sensor	concave
thicker lens	far	lens	transparent	

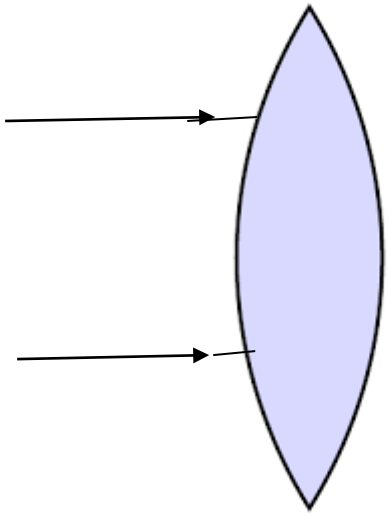
The lens in the eye is a_____ lens. To focus the image in a human eye, the shape of the convex lens is changed by becoming_____ when the object is far away and_____ when the object is nearby. In a camera, the shape of _____ the does not change. To focus the image in the camera, the image distance is changed by moving the lens towards the film or sensor when the object is _____ away, and away from the _____film or_____ when the object is nearby.

b) The diagram below shows a lens.

i) What type of lens is shown?_____

Two parallel rays of light are shown striking the lens.

ii) Complete the diagram to show the effect the lens has on the rays of light



iii) Mark on the diagram the focal length of the lens.

iv) What would the image formed by this lens be like if a **distant** object was viewed through it? Choose TWO words for your answer from the following:

Upright inverted (upside down) small large (magnified)

_____

v) What would the image formed by this lens be like if a **close** object was viewed through it? Choose TWO words for your answer from the following:

upright inverted (upside down) small large (magnified)

_____

SECTION – C

1 – Draw a table to show the differences between the human eye and a camera.

Human eye	Camera

2 – Differentiate between the following:

Yellow spot	Blind spot