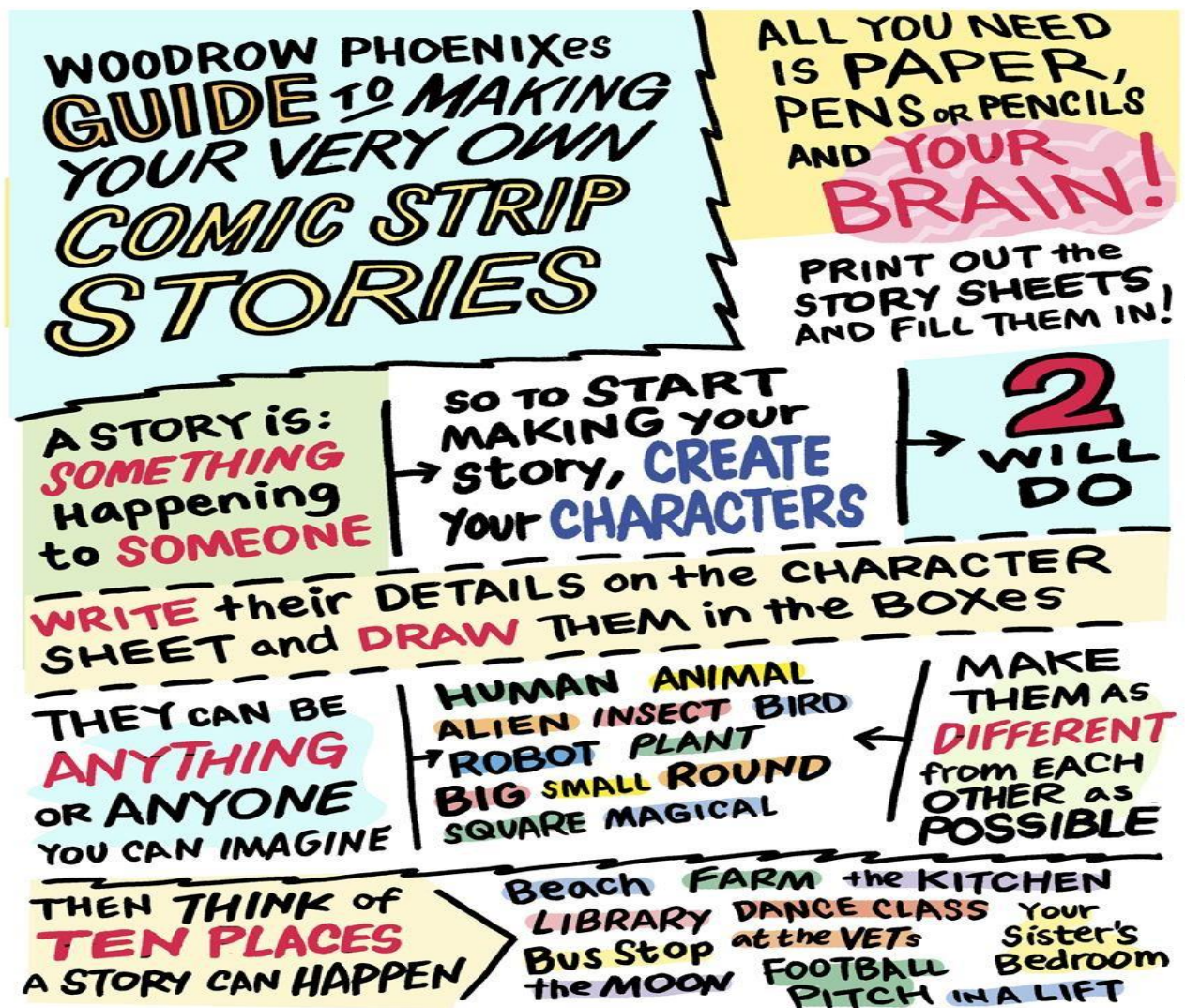




ENGLISH CRITICAL THINKING WORKSHEET 3
CLASS X

Q1. Look at the picture given below. Following the guide given in the image, create your own story. Give it a suitable title. (150-200 words)



thus, pottery is not made from raw clay but a mixture of clay and other materials.

2. The potter can form his product in one of many ways. Clay may be modelled by hand or with the assistance of a potter's wheel, may be jiggered using a tool that copies the form of a master model onto a production piece, may be poured into a mould and dried, or cut or stamped into squares or slabs. The methods for forming pottery are as varied as the artisans who create them.
3. Pottery must be fired to a temperature high enough to mature the clay, meaning that the high temperature hardens the piece to enable it to hold water. An integral part of this firing is the addition of liquid glaze (it may be painted on or dipped in the glaze) to the surface of the unfired pot, which changes chemical composition and fuses to the surface of the fired pot. Then, the pottery is called vitreous, meaning it can hold water.
4. Potters have been forming vessels from clay bodies for millions of years. When nomadic man settled down and discovered fire, the firing of clay pots was not far behind. Pinch pots, made from balls of clay into which fingers or thumbs are inserted to make the opening, may have been the first pottery. Coil pots, formed from long coils of clay that are blended together, were not far behind. These first pots were fired at low temperatures and were thus fragile and porous. Ancient potters partially solved this by burnishing the surfaces with a rock or hard wood before firing. These low-temperature fired pots were blackened by these fires.

a) What is the difference between “clay” and “clay body”?

b) What are the different ways by which the clay products can be made?

c) How does the clay “mature”?

d) What is the role of the “liquid glaze” in pottery?

e) What came soon after the discovery of fire?

Q4. Look at the poster given below and select the correct option.



- a) What is the poster referring to _____?
- i) Nightmares iii) Dreams
 - ii) Mental Health iv) Stigma
- b) Nightmares are _____
- i) Dragons iii) Nice
 - ii) Stigma iv) Bad dreams
- c) Who does “we” refer to?
- i) Psychiatrist iii) Paediatrician
 - ii) Cardiologist iv) Oncologist
- d) “#Support Not Stigma” means _____
- i) Mental illness is not a stigma and needs support.
 - ii) Mental health is considered as a stigma.
 - iii) Do not support stigma.
 - iv) Without support mental health becomes a stigma.



CRITICAL THINKING WORKSHEET - ENGLISH
CLASS 9

Q1. Read the passage and answer the questions that follow:

In this world it is not only futile for the small to appeal to authority, it is dangerous as well. Fortunately, the tiny voice seldom reaches big ears or who knows what might happen? When Gafur returned home from the landlord's and quietly lay down, his face and eyes were swollen. The chief cause of so much suffering was Mahesh, his bull. When Gafur left home that morning, Mahesh broke loose from his tether and entering the grounds of the landlord, had eaten up flowers and upset the corn drying in the sun. When finally, they tried to catch him, he had hurt the landlord's youngest daughter and had escaped. This was not the first time this had happened, but Gafur was forgiven because he was poor. If he had come around, and as on other occasions, begged for the landlord's forgiveness, he would probably have been forgiven but instead he had claimed that he paid rent, and that he was nobody's slave. This was too much for Shibu babu, the landlord, to swallow. Gafur had borne the beatings and tortures without protest. At home, too, he lay in a corner without a word. His heart burnt within him like the sun outside. He kept no count of how time had passed.

a) What is described as a 'tiny voice'?

b) Why was Gafur's face swollen?

c) What upset Shibu babu?

d) Why was Gafur suffering?

e) Explain the meaning of 'his heart burnt within him'.

Q2. Do you think that the passage is based on exploitation? Why do you think it is futile for the small to appeal to the authorities?

Q3. Unscramble the letters to find the correct word.

1. S G S L A _____
2. L A C L I _____
3. A T S G H _____
4. N E R N A B _____
5. P A E C R T _____
6. B K C I R _____
7. L O S A M N _____
8. T O S L S _____
9. S T R E D E _____
10. N I A T G _____

Q4. Find the meanings of these Phrases and idioms.

1. Green with envy

2. Half-baked idea

3. Spill the beans

4. Dash off

5. Change of heart

Q5. Write the correct spellings of the following words:

Incorrect Spellings

1. Accomodation _____

2. Pnenomia _____

3. Dirhea _____

4. Gramer _____

5. Indivisual _____

6. Arithmatic _____

7. Apearance _____

8. Receveid _____

9. Reffered _____

10. Accross _____

BBPS, PITAMPURA



MENTAL AGILITY

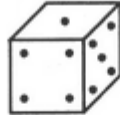
LEVEL – 2

TOPIC – DICE AND CUBE
SERIAL NO. 3(Answer key)

Q1 Observe the dots on a dice (one to six dots) in the following figures. How many dots are contained on the face opposite to that containing four dots?



(i)



(ii)

- A. 2
- B. 3
- C. 6
- D. Cannot be determined

Answer : A

(We shall assume the dice in fig. (ii) to be rotated so that the 5 dots appear at the same position as in fig. (i) i.e. on RHS face (i.e. on face II as per activity 1) and 1 dot appears at the same position as in fig; (i) i.e. on Front face (i.e. on face I). Then, from the, two figures, 2 dots appear on the top face (i.e. on face V) and 4 dots appear on the Bottom face (i.e. on face VI).)

Q2 Three different positions of a dice are shown below. How many dots lie opposite 2 dots?



(i)



(ii)



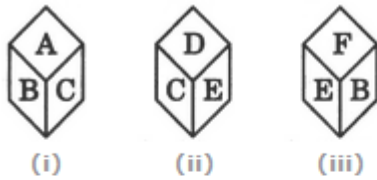
(iii)

- A. 1
- B. 3
- C. 5
- D. 6

ANSWER : C

(From figures (ii) and (iii), we conclude that 1, 6, 3 and 4 dots lie adjacent to 5 dots. Therefore, 2 dots must lie opposite 5 dots. Conversely, 5 dots must lie opposite 2 dots.)

Q3 The six faces of a dice have been marked with alphabets A, B, C, D, E and F respectively. This dice is rolled down three times. The three positions are shown as:



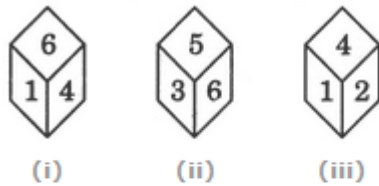
Find the alphabet opposite A.

- A. C
- B. D
- C. E
- D. F

ANSWER : C

(From figures (ii) and (iii), we conclude that the alphabets C, D, B and F appear adjacent to the alphabet E. Therefore, the alphabet A appears opposite E. Conversely, E appears opposite A.)

- Q4. Three positions of a dice are given. Based on them find out which number is found opposite the number 2 in the given cube.



- A. 6
- B. 5
- C. 3
- D. 1

ANSWER : A

(From figures (i) and (ii), we conclude that the numbers 1, 4, 3 and 5 lie adjacent to the number 6. Clearly, the number 2 lies opposite 6 and conversely 6 lies opposite 2.)

- Q5. A dice is numbered from 1 to 6 in different ways. If 1 is adjacent to 2, 3 and 5, then which of the following statements is necessarily true?

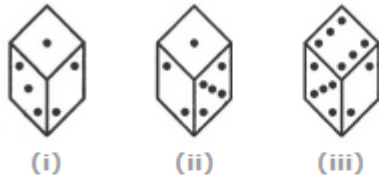
- A. 4 is adjacent to 6
- B. 2 is adjacent to 5
- C. 1 is adjacent to 6

D. 1 is adjacent to 4

ANSWER : A

(If 1 is adjacent to 2, 3 and 5, then either 4 or 6 lies opposite to 1. So, the numbers 4 and 6 cannot lie opposite to each other. Hence, 4 necessarily lies adjacent to 6.)

Q6 Below are depicted the three different positions of a dice. Find the number of dots on the face opposite to the face with one dot.



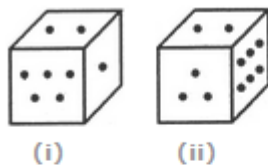
- A. 2
- B. 3
- C. 4
- D. 6

ANSWER : D

(From figures (i), (ii) and (iii), we conclude that 1, 3, 5 and 6 dots appear adjacent to the face with 2 dots. Therefore, 4 dots will appear opposite to 2 dots. Now, from figures (i) and (ii), we conclude that 2, 3 and 5 dots appear adjacent to 1 dot. Therefore, either 4 or 6 dots will appear opposite to 1 dot. But since, 4 dots appear opposite to 2 dots it follows that 6 dots will appear opposite 1 dots.)

Q7

Two positions of a block are given below. When 1 is at the top, which number will be at the bottom?



- A. 2
- B. 3
- C. 4
- D. 6

ANSWER : D

(Number 2 is common to the two positions of the dice. We assume the dice in fig. (ii) to be rotated so that 2 remains on the top face (i.e. face V as per activity 1) and the numbers 3 and 6 move to the faces hidden behind 5 and 1 respectively [in fig. (i)]. Then, clearly, 5 lies opposite 3 and 6 lies opposite 1. Hence, when 1 is at the top, then 6 will be at the bottom.)

Q8 A dice is numbered from 1 to 6 in different ways.

If 1 is opposite to 5 and 2 is opposite to 3, then

- A. 4 is adjacent to 3 and 6
- B. 2 is adjacent to 4 and 6
- C. 4 is adjacent to 5 and 6
- D. 6 is adjacent to 3 and 4

ANSWER : B

(If 1 is opposite to 5 and 2 is opposite to 3, then 4 definitely lies opposite to 6. Therefore, 2 cannot lie opposite to any of the two numbers - 4 or 6. Hence, 2 necessarily lies adjacent to both 4 and 6.)

Q9 **A cube painted yellow on all its faces is then cut into 27 smaller cubes of identical sizes. How many cubes are painted on one face only?**

Here the painted cube is cut into 27 equal-size smaller cubes. So it has been cut into a $3 * 3 * 3$ arrangement and the image that comes to mind is a Rubik's cube.

There is 1 cube in the very center , so 1 cube has no paint.

On each of the 6 sides of the cube, there is a central smaller cube that is painted once.

Or The cube (original) has to be a $3*3*3$

If all faces are painted yellow

- All **vertices** will have **3** sides coloured yellow
- The 2nd (**middle**) cube on the edges has **2** sides coloured yellow
- The **central** cube on each face has only **1** side coloured yellow

Their being 6 faces no of cubes coloured yellow are 6

Q10 **A cube is coloured red on all faces. It is cut into 216 smaller cubes of equal size. How many cubes have two faces coloured?**

So cube is coloured on all faces and if you divide it to 216 smaller cubes then each cube will 36 cubes on each face

Since $6 \times 6 \times 6 = 216$

Therefore cubes on each face is 36

So let's find out first all cubes which have at least one face coloured

I.e. all small cubes on which were the face of the larger cube

That could be all 8 corner cubes + 12 edge cubes+ 6 face cubes

That will be $8 + 12 * 4$ (since there are 6 cubes in each edge with 2 corners so $6-2$ is the edge cubes) + $6 * ((4*4)$ same reason rest 2 lines are edges)

So total comes out to be $8+48+96=152$ coloured cubes

Now 3 side coloured cubes are corner cubes= 8

2 side coloured cubes are edges = 48

1 side coloured cubes are face = 96