Holiday Homework Instructions

1. **Use separate folders:** Keep your holiday homework organized by using separate folders for each subject.
2. **Sheets and Size:** Please use presentation sheets of A-4 size
3. **Neat and legible work:** Ensure your work is neat, legible, and well-presented.
4. **Follow instructions:** Read and follow the instructions for each assignment carefully.
    a. **Complete all tasks:** Make sure to complete all tasks and assignments as given by your teachers.
    b. **Use appropriate stationery:** Use the required stationery, such as A4 sheets, graph paper, or drawing sheets, as specified for each assignment.
    c. Submit your holiday homework by July 25, 2025.
    d. Submission of all assignment of all subjects are mandatory.

Tips for neat work:

- Use a ruler to draw margins and keep your work tidy.
- Write your name, class, and subject on each sheet.
- Use clear and legible School handwriting.
- Keep your work free of scribbles and erasures.

St. Anthony's High School Faisal Town Lahore

Biology Holidays Homework Class 8C

Instructions :

Use Assignment sheets to answer the questions. Write your name, subject, adm.no., and follow school hand writing . Submit your homework in proper files.

Worksheet 1

1. Fig. 1.1 shows a photograph of a pseudoscorpion.

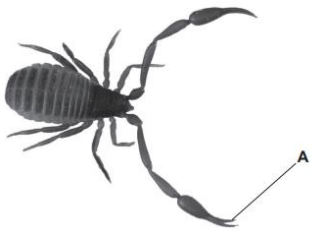


Fig 1.1

(a) (i) State 2 features, visible in Fig. 1.1, that can be used to classify this organism as an arachnid. [2]

(ii) State the kingdom that arachnids belong to. ----------[1]

(b) (i) Complete the definition of the term adaptive feature by inserting the missing words. An adaptive feature is an ..... feature that helps an organism to ..... and ..... in its environment. [3]

(ii) The part labelled A in Fig. 1.1 is an adaptive feature of the pseudoscorpion.

Suggest a function of the part labelled A in Fig. 1.1. [1]

2.(a)Suggest two reasons why most biologists do not classify viruses as living organisms. [2]

(b)Name one example of a virus .[1]

(c) Give one structural difference between a bacterium and a virus .[1]

3.(a) The table shows four different groups of organisms. Complete the table to give an example for each group.

Group	Example
animals	
fungi	
bacteria	
protoctists	

(b) Different groups have different features.

Complete the table below to show if the feature is present in all, some or none of each group.

Some of the table has been completed for you.

	Are multicellular	**Cells have nucleus**	**Cells contain chloroplasts**	**Cells have cell walls**
fungi		All		all
bacteria			some	all
protoctists	none		some	

(c) (**i**) Give one way in which the structure of a virus differs from a bacterium. [1]

(**ii**) Bacteria and viruses can act as pathogens. Give an example of a disease caused by a virus. [1]

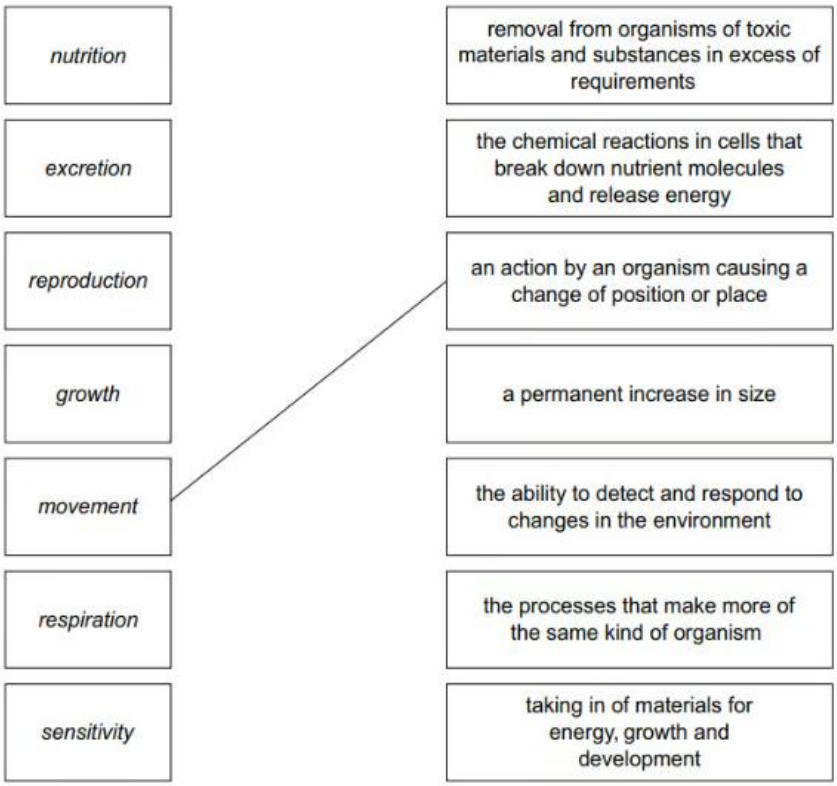
(**4**) a. Although plants and animals have many different features, they also have some features in common. The table lists some features.

In each box, place a tick (✓) if the feature is present or a cross (x) if the feature is absent. One has been done for you.

Feature	**Plants**	**Animals**
can move from place to place		✓
can carry out photosynthesis		
are multicellular		
have cells with cell walls		
store carbohydrate as glycogen		

Worksheet 2

1. All living organisms show the same seven characteristics. These are listed below, along with their definitions. Match the characteristics and definitions by drawing lines between them on the diagram below. One has been done for you.



2.(a) Fig 1 is a photograph of a lion.

Fig. 1

Lions are mammals and have the scientific name *Panthera leo.*

(i) State one feature visible in Fig 1. That identifies the lion as a mammal. [1]

(ii|) State the genus of this mammal. [1]

(b) Mammals are one of the five groups of vertebrates. Some features of three vertebrates groups are listed. Identify the vertebrate groups.

(i) Lay soft-shelled eggs [1]

(ii) Feathers [1]

(iii) Smooth , moist skin [1]

3. **(a)** Fig. 2 is a diagram of an animal cell.

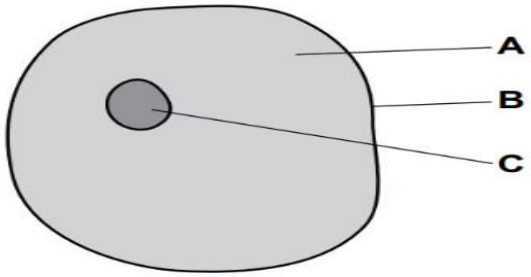


Fig. 2

(i) State the names of two structures in plant cells that are absent in animal cells.

(ii) State the name of one structure that is present in bacterial cells and in plant cell but absent in animal cells.

(iii) State the functions of these specialized cells.

Red Blood cell Ciliated Cell

(c) Fig 1 shows a specialized plant cell.

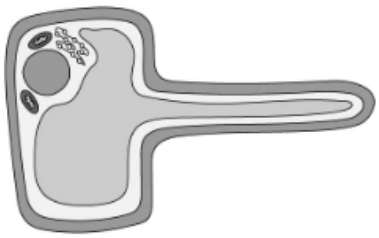


Fig. 1

(i) Identify the plant cell in Fig. 1. [1]

(ii) State and explain one adaptation that allows this cell to carry out its function. [2]

(d) Identify with a tick the structures that are found in both plant and animal cells. [3]

Structure	In animal cells	In plant cells
Nucleus		
Vacuole		
Cell Wall		

4.a. With reference to named components, describe how the structure of one animal cell for example from fresh liver would appear different from a plant cell for example from an onion epidermis. [4]

b. State the relationship between structure and function for both of the following:

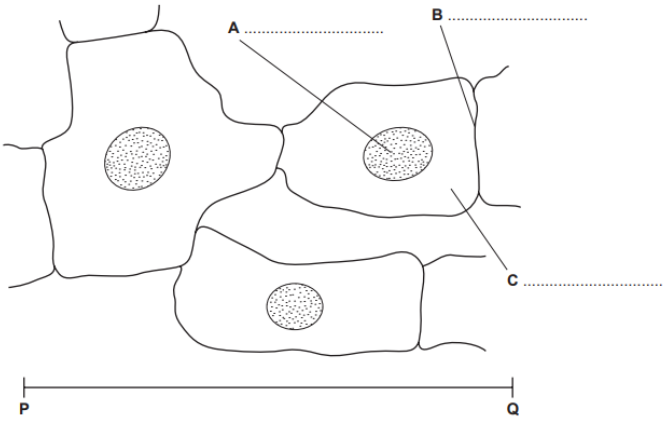
i. Xylem vessels ii. Red blood cells [6]

5.a. Describe the functions of the cell membrane. [5]

b. Explain the advantages to a plant of having its cell membranes surrounded by cell walls. [5]

Worksheet 3

1. **a**. Fig. 2.2 shows some liver cells as seen with a light microscope. Draw the give figure.



(b) (i) Label, on Fig. 2.2, the structures A, B and C. **[3]**

(ii) The distance P-Q is 0.06 mm. Calculate the magnification of Fig. 2.2. Show your working.
Magnification = ---------- **[2]**

(iii). Define partially permeable membrane. **[2]**

2. Describe and compare the following

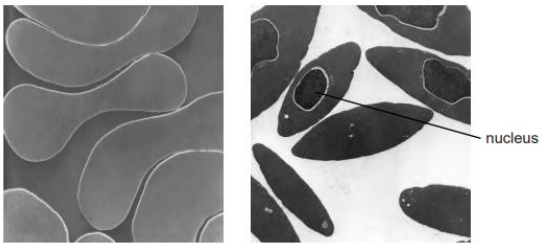
a. insects and crustaceans

b. viruses and bacteria

c. Arachnids and myriapods

d. amphibian and reptiles

3. **Fig. 3.1 shows images of red blood cells from a human, A, and a bird, B.**



(a) State the function of red blood cells. [1]

(b) There is a nucleus present in each of the red blood cells of the bird, as shown in Fig. 3.1.

(i) State the function of a nucleus. [1]

(ii) Human red blood cells do not contain a nucleus. State an advantage of this .[1]

4. (a) Fig. 4.1 is a diagram showing some of the structures found in a plant cell.

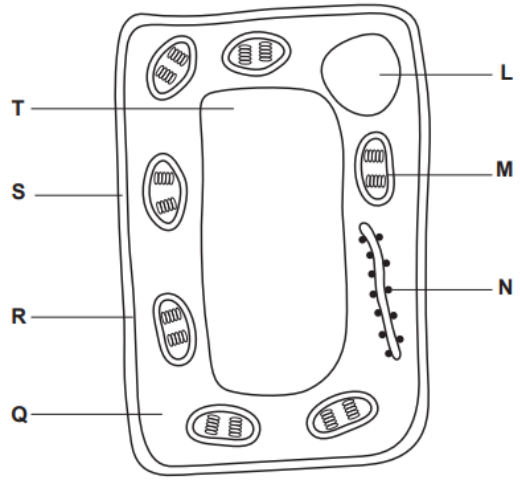


Fig 4.1

Draw a Table and show the names of some plant cell structures, their functions and the letters that identify them in Fig. 4.1 [5]

(b) (i) State the name of one cell structure that is found in plant cells but not in animal cells. [1]

(ii) State the name of one cell structure that is found in plant cells and in animal cells. [1]

Worksheet 4

1. Fig 1.1 shows a diagram of a bacterial cell.

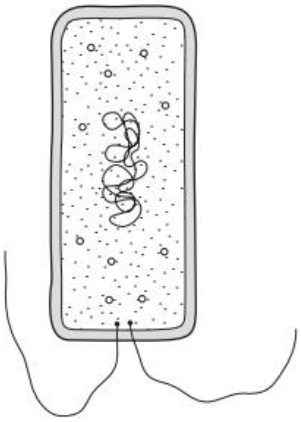


Fig. 1.1

a. i. State four structural features present in a photosynthesizing plant cell that make t different from the bacterial cell in Fig 1.1. [4]

b. ii. State two structural features present in both the bacterial cell in Fig 1.1 and in an animal cell such as a liver cell. [2]

Q. 2. Fig 1.1 shows some cells from the lining of the trachea.

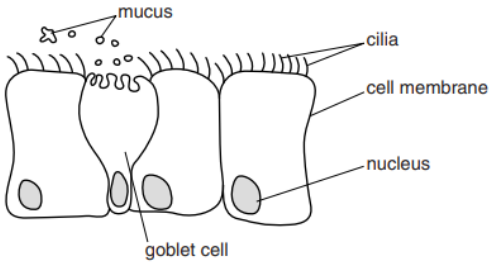


Fig. 1.1

(a) Describe the functions of the nucleus and the cell membrane.

Nucleus [2] Cell membrane [2]

(b) The cells in Fig 1.1 form a tissue. Define the term *tissue*. [1]

(c) The goblet cell secretes mucus.Describe the role of mucus and cilia in the trachea. [4]

3. (a) Describe the meaning of the term species. [2]

(b) Fig. 3.1 is a photograph of *Lithobius forficatus*, a species of myriapod.

Fig 3.1

(i) State the genus of the organism shown in Fig. 1.1. [1]

(ii) State one feature visible in Fig. 3.1 that identifies the organism as:

a myriapod _____ an arthropod. _____ [2]

(iii) State the names of two groups of arthropods, other than myriapods. **(iv)** State two features of plant cells that would be absent in the cells of the organism shown in Fig. 3.1. **[2]**

(c) Adaptive features enable organisms to survive in their environment. Fig. 3.2 is a photograph of another species of arthropod. Some of its adaptive features are visible in Fig. 3.2.

Fig 3.2

(i) State one adaptive feature visible in Fig. 3.2 that reduces water loss when the organism is on land. **[1]**

(ii) State the name of the kingdom that the organism in Fig. 3.2 belongs to. **[1]**

Worksheet 5

1. Cicadas are insects that make a lot of noise. Fig 1.1shows an adult chorus cicada, *Amphipsalta zelandica*, that is only found in New Zealand.

(a) State three features visible in fig 1.1 that show that the chorus cicada is an insect. [3]

(b) Insects are classified in the same group as crustaceans, arachnids and myriapods. Name the group that contains all theses animals. [1]

Evolutionary relationships between different species are investigated by examining DNA. (c) State precisely where DNA is found in a cell. [2]

2. a. Arrange the structures in the list in increasing order of organization, starting with the smallest structure. Cell, organism, organ , organ system , tissue. [5]

---------- → ---------- → ---------- → ---------- → ----------

b. Fig 1 shows a red blood cell. The cell contains no nucleus.

Fig.1

Explain why a red blood cell does not contain a nucleus. [2]

C.i. State the formula that links image size, magnification and actual size when examining specimens under a microscope. [1]

ii. Explain why magnification has no units. [1]

iii. A diagram of a cell is printed in a textbook and has a width of 62000 micrometer on the page but has a width of 80 micrometer in real life. Calculate the magnification of the printed drawing. [2]

iv. Explain why units often need to be converted before attempting magnification. [2]

v. A student set up a light microscope to observe a specimen. The magnification of the eyepiece lens was x 10 and the magnification of the objective lens was x 20. Calculate the overall magnification of the light microscope. [2]

Worksheet 6 :

1 Fig. 1.1 shows a flowering shoot of tiger lily, *Lilium tigrinum.*

Fig 1.1

(a) State the name of the genus of the tiger lily. **[1]**

(b) Name the parts labelled A to D. **[4]**

(c) The tiger lily plant is a monocotyledon. List two features, visible in Fig. 1.1, that show it is a monocotyledon. **[2]**

2. Toads are amphibians. Only two species are native to Britain, the Common toad (Bufo bufo) and the Natterjack toad (Bufo calamita). Natterjack toads like warm sandy soil in open and sunny habitats, with shallow pools for breeding. Examples of these habitats are heathland and sand dunes. Common toads like cooler, more shady habitats, such as woodland. Many areas of sand dunes are being developed for camp sites. Heathland can easily change to woodland as trees grow on it. In the summer, woodland is colder than heathland due to the shade the trees create. These conditions suit the Common toad, but not the Natterjack. As a result of the changing habitats the Natterjack toad is becoming an endangered species.

(a) (i) Name one external feature that identifies an animal as an amphibian. [1]

(ii) Amphibians are a class of vertebrate. Name two other vertebrate classes. [2]

(b) State one piece of information from the passage to show that the Common toad and Natterjack toad are closely related species. [1]

St Anthony's High School Faisal Town Lahore

Name ……. Admission No…….

Subject: Computer Science Summer Vacation Worksheet 1 2025 Class 8 C

Q no. 1: A school network has several computers. Each computer in the network has a media access control (MAC) address. Hexadecimal is used for MAC addresses. Part of a MAC address is given

97-5C-E1

Each pair of digits is stored as binary in an 8-bit register. **97** and **5C**

a) Complete the binary register for these two pair of digits

97								
5C								

b) Describe what is meant by a MAC address.

c) Give two other uses of hexadecimal in computer science

d) Another value is stored as binary in a register

0	1	0	1	0	0	1	0

A logical left shift of two places in performed on the binary value. Complete the binary register to show its contents after this logical left shift.

Q No. 2: Negative **denary** numbers can also be represented as binary using two's complement. Complete the binary register for the denary value −74. You must show all your working.

Q No. 3: Binary is a number system used by computers.

(a) (i) Four 8-bit binary values are given.
Tick (✓) one box to show which 8-bit binary value is the correct conversion for the denary value 50.

A 00101010 **B** 00110010 **C** 01001100 **D** 01010000

(ii) Four 8-bit binary values are given.
Tick (✓) one box to show which 8-bit binary value is the correct conversion for the hexadecimal value 90.

A 00001001 **B** 01011010 **C** 10010000 **D** 01100100

(b) Explain why a computer system can only process data in binary form.

c) Two 8-bit binary values are given. Add the two 8-bit binary values. Give your answer in binary. Show all your working.

```
  0 0 1 1 1 0 0 1
+ 0 1 0 0 1 0 1 0
-----------------
-----------------
```

(d) Two 8-bit binary values are added. The result of this calculation needs to be stored in an 8-bit register. The denary result of this calculation is 301. This generates an error. State the name of this type of error and explain why this error occurs.

(i) Error name_____

(ii)Explanation

_____

_____

_____

St Anthony's High School Faisal Town Lahore

Name …… Admission No…….

Subject: Computer Science **Summer Vacation Worksheet 2 2025** **Class 8 C**

Q1: Convert the following positive denary numbers into 8-bit binary numbers in the two's complement format:

a) 125

b) 20

Q2: Convert the following binary numbers (written in two's complement format) into positive denary numbers:

-128	64	32	16	8	4	2	1
0	1	1	1	1	1	0	1

Working Space:

-128	64	32	16	8	4	2	1
0	1	0	0	0	0	0	1

Working Space:

Q3: Convert the following negative denary numbers into binary numbers using the two's complement format:

a) -92

Working Space:

a) -127

Working Space:

_____
_____
_____
_____

Q4: Convert the following negative binary numbers (written in two's complement format) into negative denary numbers:

a)

-128	64	32	16	8	4	2	1
1	1	1	1	1	1	0	1

Ans:

b)

-128	64	32	16	8	4	2	1
1	1	1	1	0	0	0	1

Ans:

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Name ……. Admission No…….

Subject: Computer Science Summer Vacation Worksheet 3 2025 Class 8 C

Q1: Carry out the following binary additions:

a)
```
  0 0 0 1 1 1 0 1
+ 0 1 1 0 0 1 1 0
-----------------

-----------------
```

b)
```
  0 0 1 1 1 1 0 0
+ 0 1 1 1 1 0 1 1
-----------------

-----------------
```

Q2: Convert the following denary numbers into binary and then carry out the binary addition of the two numbers and check your answer against the equivalent denary sum:

a) 1 0 0 + 1 4 0

Working Space:

b) 6 6 + 1 6 6

Working Space:

Q3:

a) Write down the denary value of the following binary number.

0 1 1 0 1 0 0 0

Sol:

b) Shift the binary number three places to the right and comment on your result.

Sol:

c) Write down the denary value of the following binary number.

0 0 0 0 1 1 1 1

Sol:

d) Shift the binary number four places to the left and comment on your result

Sol:

St Anthony's High School Faisal Town Lahore

Name …… Adm #: …… Time: 40 min

Subject: Computer Science **Summer Vacation Worksheet 4 2025** **Class 8 C**

Q1: A software developer is using a microphone to collect various sounds for his new game. He is also using a sound editing app. When collecting sounds, the software developer can decide on the sampling resolution he wishes to use.

a) i What is meant by ***sampling resolution***? [1]

_____

_____

_____

ii Describe how sampling resolution will affect how accurate the stored digitised sound will be. [3]

_____

_____

_____

The software developer will include images in his new game.

b) i Explain the term ***image resolution***. [1]

_____

_____

_____

ii The software developer is using 16-color bitmap images. How many bits would be used to encode data for **one** pixel of his image? [1]

_____

_____

_____

iii Describe any file compression techniques the developer may use. [3]

_____

_____

_____

Q2: The editor of a movie is finalising the music score. He will send the final version of his score to the movie producer by email attachment.

a) Describe how ***sampling*** is used to record the music sound clips. [3]

_____

_____

_____

b) The music sound clips need to undergo some form of data compression before the music editor can send them via email.
Which type of compression, ***lossy*** or ***lossless***, should he use?
Give a justification for your answer. [3]

_____

_____

_____

c) One method of data compression is known as ***run-length encoding (RLE)***.

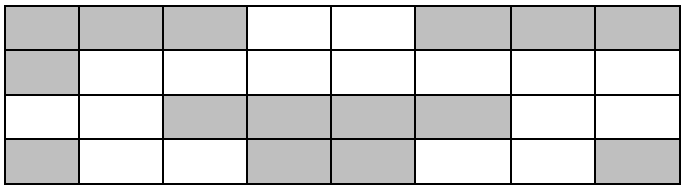
i What is meant by RLE? [3]

_____

_____

_____

ii The following image is being developed:



Show how RLE would be used to produce a compressed file for the above image. Write down the data you would expect to see in the RLE compressed format (you may assume that the grey squares have a code value of 0 and the white squares have a code value of 1). [4]

_____

_____

_____

_____

_____

_____

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Name …….. Adm #: …….. Time: 40 min

Subject: Computer Science **Summer Vacation Worksheet 5 2025** **Class 8 C**

Q1: A bitmap image has the following resolution: 1140 × 1080 pixels.
The image uses a color depth of 24 bits.

a Explain the term **pixel**. [1]

b Explain the term **color depth**. [1]

c Describe how it would be possible to increase the number of these images which could be stored on this memory stick. [3]

Q2 a Nancy has captured images of her holiday with her camera. The captured images are stored as digital photo files on her camera. Explain how the captured images are converted to digital photo files. [4]

b Nancy wants to email photos to Nadia. Many of the photos are very large files, so Nancy needs to reduce their file size as much as possible. Identify which type of file compression would be most suitable for Nancy to use. Explain your choice. [4]

Q3 A stopwatch uses six digits to store hours, minutes, and seconds. The stopwatch stopped at:

02 : 31 : 58

Hours Minutes Seconds

An 8-bit register is used to store each pair of digits.
a Write the 8-bit binary numbers that are currently stored for the **Hours, Minutes** and **Seconds**. [3]

Hours								
Minutes								
Seconds								

b The stopwatch is started again and then stopped. When the watch is stopped, the 8-bit binary registers show:

Hours	0	0	0	0		1	0	1
Minutes	0	0	0	1	1	0	1	0
Seconds	0	0	1	1	0	1	1	1

Write the denary values that will now be shown on the stopwatch. [3]

: **:**

Hours Minutes Seconds

St Anthony's High School Faisal Town Lahore

Name …… Adm #: …….. Time: 40 min

Subject: Computer Science **Summer Vacation Worksheet 6 2025** **Class 8 C**

Q1: An 8-bit binary register contains the value:

0	**0**	**1**	**1**	**0**	**1**	**1**	**0**

a Write down the denary value of this register. [1]

b The contents of this register undergo a logical shift ***one place*** to the right.

i Show the result of this right shift.

ii Write down the denary value following this right shift. [2]

c The contents of this register, at the start of the question, now undergo a logical shift ***two places*** to the left.

i Show the contents of the register after this left shift operation. [1]

ii State, with reasons, the effect of this shift on the denary value in ***part a***. [2]

Q2: a Convert the following denary numbers into 8-bit binary numbers: [4]

i 123

ii 55

b Carry out the following additions using your binary values from ***part a***: [4]

i 123 + 55

ii 123 + 180

c i Write down the two's complement value of: [2]

0	**1**	**1**	**1**	**0**	**1**	**0**	**0**

ii Write down the binary value of −112 using two's complement notation. [1]

iii Write down the denary value of the following binary number, which is using two's complement notation: [1]

1	**0**	**1**	**1**	**1**	**0**	**0**	**1**

d Use two's complement notation to find the 8-bit binary value of −104. [2]

Q3 Six calculations are shown on the left and eleven denary values are shown on the right. By drawing arrows, connect each calculation to its correct denary value.

An 8-bit register uses two's complement notation. What is the denary value of: **0 0 1 0 1 1 0 1** ?	10
	16
Convert the following into GiB: **59 055 800 320 bytes**	20
	28
If 2x = 1 048 576 bytes What is the value of x?	45
	46
Give the denary equivalent of the following hexadecimal number: **3F**	55
What is the denary result of the following binary addition: **0 0 0 1 0 0 1 1** **+ 0 0 0 1 1 0 1 1**	57
	60
Find the hexadecimal value of the following denary number: **40**	63
	80

8th C, Holidays homework

Worksheet No 1 Date

Q1)

The table shows some properties of lactose, sulphur and potassium nitrate.

property	lactose	sulphur	potassium nitrate
state at room temperature	solid	solid	solid
solubility in water	soluble	insoluble	soluble
electrical conductivity of a solution in water	does not conduct	no solution formed	conducts
structure	molecular	molecular	ionic giant structure

Suggest how you can separate a solid mixture of lactose and sulphur.

.....

.....

.....[2]

Q.2. i) Define the term Isotope with an example.

……

……

……

……

……

……

ii) The table shows the number of subatomic particles in an atom of Iron.

Types of particle	Number of particles	Charge on the particle
Electron	26	
Neutron	30	
Proton	26	

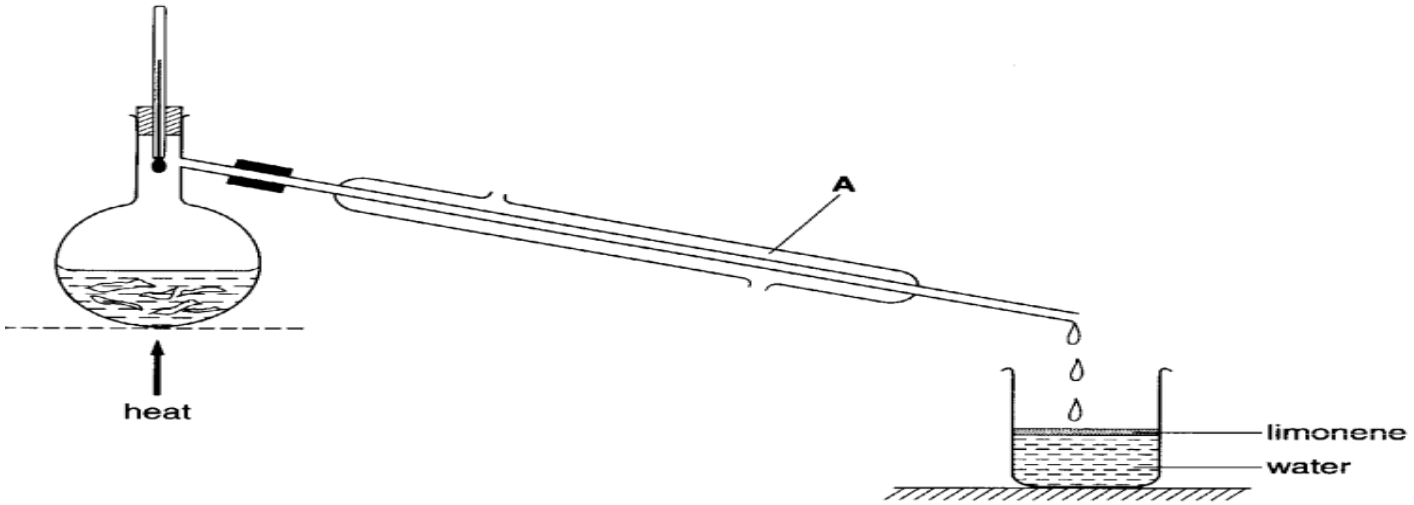
Q.3. Fill in the blanks for the elements in this chart.

Element	Number of Protons	Number of Neutrons	Number of Electrons	Atomic Mass	Atomic Number
lithium					
carbon					
chlorine					
silver					
lead					
calcium					
tantalum					
radium					
uranium					
americium					
Nitrogen					
Oxygen					
Sulphur					
Magnesium					
Aluminium					
Cobalt					

Worksheet No 2 Date

(Q4)

Limonene is a liquid hydrocarbon found in orange peel. It can be extracted by boiling orange peel with water, using the apparatus shown below. The mixture of limonene and water distils at a temperature which is 1 °C below the boiling point of water.



(i) State the name of the piece of apparatus labelled **A**.

.....[1]

(ii) Suggest what the reading on the thermometer will be when the limonene-water mixture is being distilled.

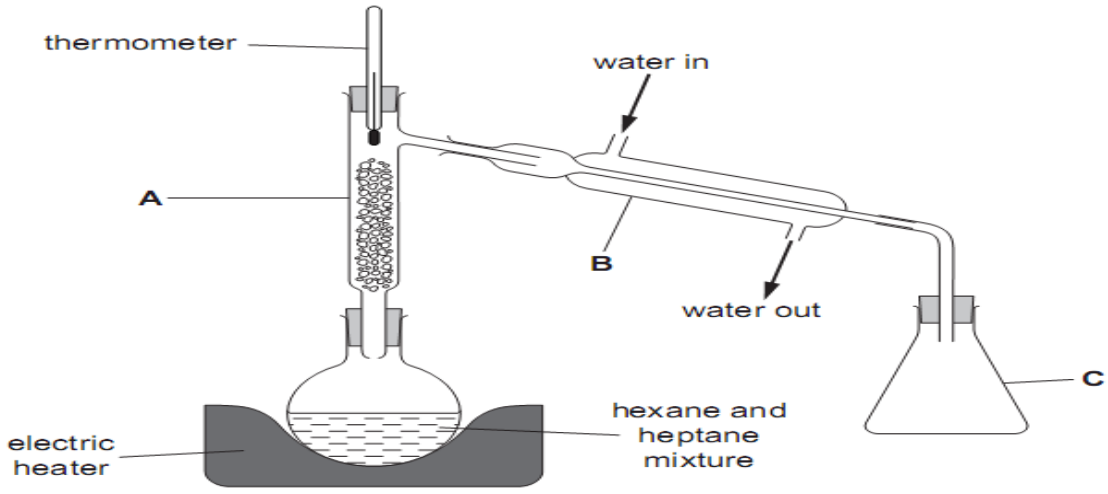
..... °C [1]

(iii) Limonene is less dense than water. What information in the diagram shows this?

.....[1]

(Q5)

A student separated hexane, C_6H_{14}, (b.p. 69 °C) and heptane, C_7H_{16}, (b.p. 98 °C) using the apparatus shown below.



(a) Identify **two** errors in the student's apparatus.

1. .....

2. ..... [2]

The errors were then corrected and the separation started.

(b) **(i)** Name apparatus **A**.

..... [1]

(ii) What is the purpose of apparatus **A**?

..... [1]

(iii) Name apparatus **B**.

..... [1]

(iv) What is the purpose of apparatus **B**?

..... [1]

(c) **(i)** What was the reading on the thermometer when the first few drops of liquid appeared in **C**?

..... °C [1]

(ii) Name this liquid.

..... [1]

(iii) How did the student know when all of this liquid had distilled over?

..... [1]

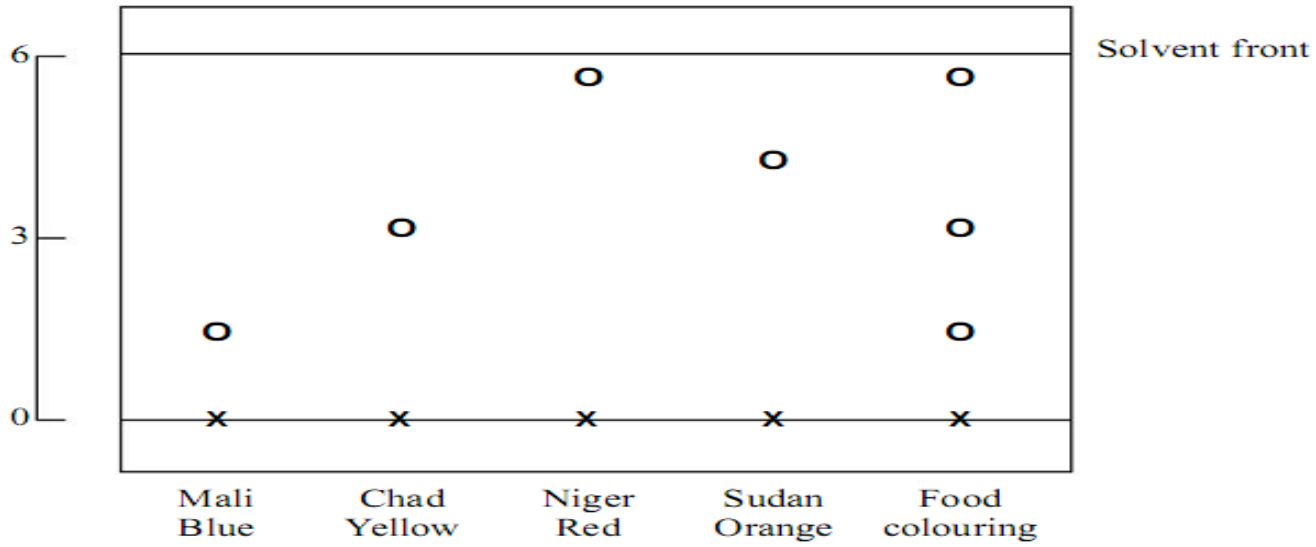
(d) Why was an electric heater rather than a flame used to heat the mixture?

..... [1]

Worksheet No 3 Date

(Q6)

A student used chromatography to investigate the dyes in a food colouring. A series of dyes and an extract of the food colouring were spotted on the paper at the points marked **X**. Ethanol was used as the solvent to carry the dyes up the paper. The chromatogram below shows the results.



(i) State which dye is the most soluble in ethanol.

.....

(1)

(ii) State which dye is not present in the food colouring.

.....

(1)

(iii) The R_f value of a dye is calculated by using the formula:

$$R_f \text{ value} = \frac{\text{distance travelled by dye}}{\text{distance travelled by solvent front}}$$

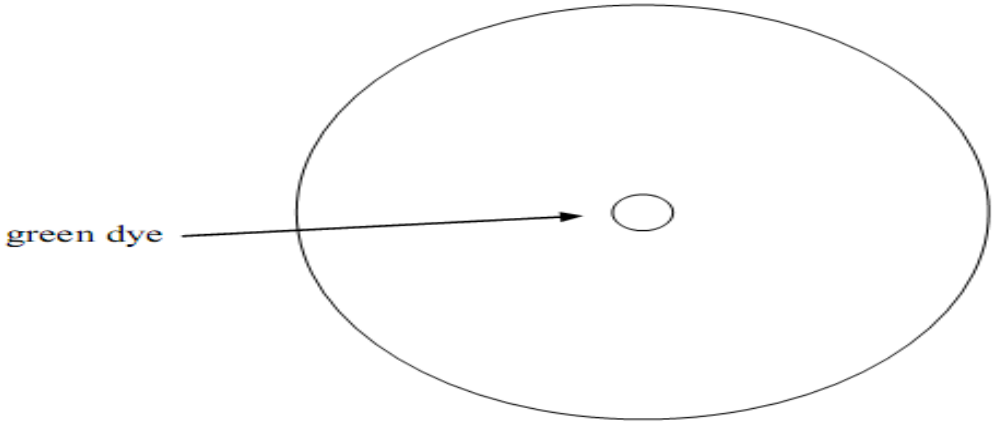
Calculate the R_f value for Chad Yellow.

.....

.....

(2)

(iv) A green dye was thought to consist of Mali Blue and Chad Yellow. A spot of the dye was placed in the centre of a piece of circular filter paper and ethanol was dropped on it so that the dyes spread out. Draw the final appearance of the filter paper if Mali Blue and Chad Yellow were present and label the lines to identify the components of the dye.



(1)

(Q7)

Chromatography is used to identify simple carbohydrates, such as sugars, in plant material.

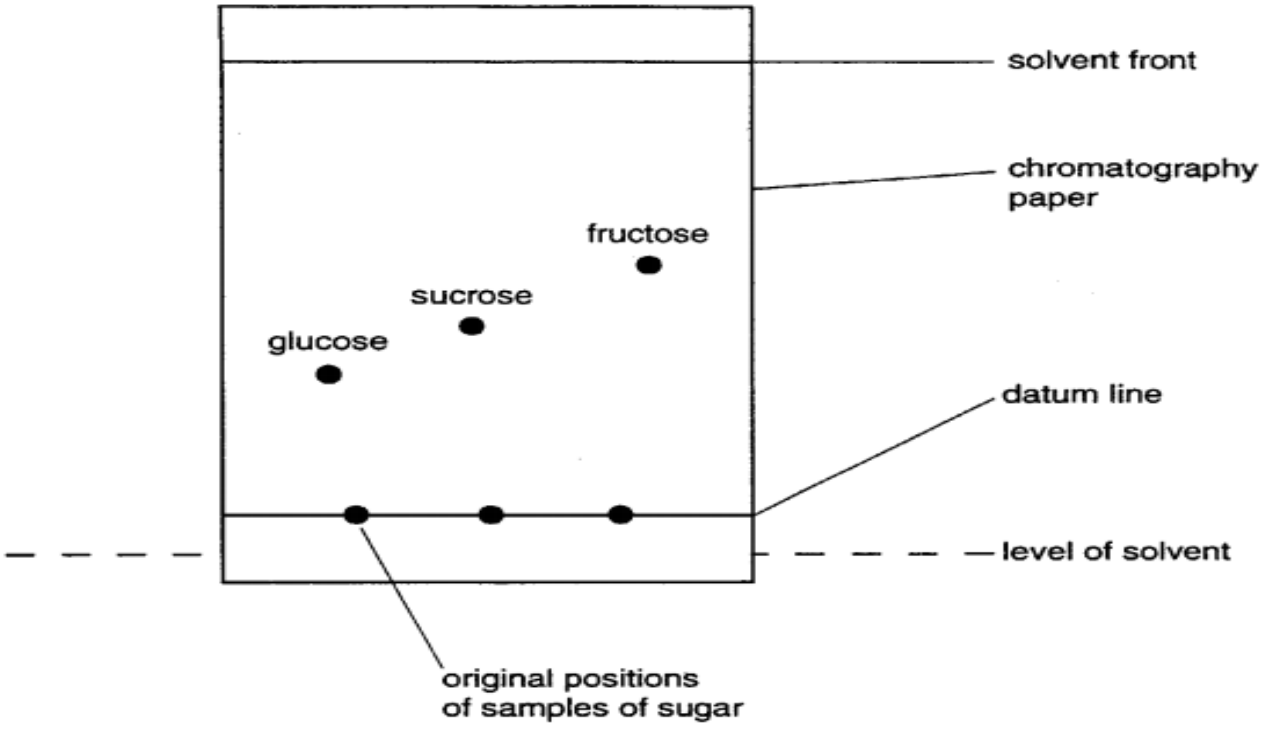


Fig. 5.2

(ii) Why is the datum line drawn in pencil?

.....[1]

(iii) Suggest a reason why it is necessary to spray the chromatogram with resorcinol.

.....

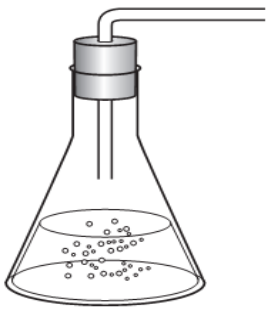
.....[2]

(iv) Describe how chromatography could be used to show that the hydrolysis of starch produces only one sugar, glucose.

.....

.....[2]

(Q8)



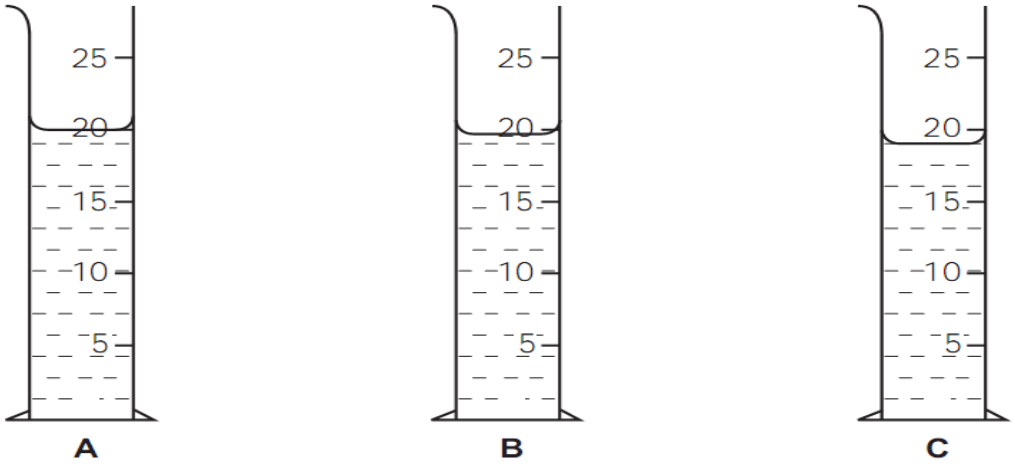
Name the piece of apparatus which should be attached to the flask, for collecting and measuring the volume of carbon dioxide produced.

.....[1]

Worksheet No 4 Date

(Q9)

Which of the measuring cylinders shows exactly 20 cm^3 of liquid?



answer ..... [1]

(Q10)

(a) Give the name of the physical change that occurs when steam is converted to water.

.....

(1)

(b) Describe the spacing and the movement of particles in steam and in water.

Steam .....

.....

.....

Water .....

.....

.....

(4)

(c) Suggest why it requires more heat energy to turn a given mass of water into steam than to turn the same mass of ice into water.

.....

.....

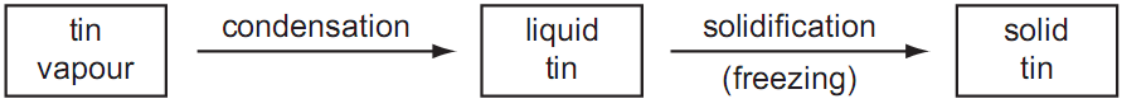
.....

.....

(2)

(Q11)

The diagram shows the changes of state when tin vapour is cooled slowly to room temperature.



Explain what happens to the arrangement and motion of the atoms during these changes.

.....

.....

.....

.....

..... [4]

Worksheet No 5 Date

(Q12)

(a) Different gases diffuse at different speeds.

(i) What is meant by the term *diffusion*?

.....

..... [1]

(ii) What property of a gas molecule affects the speed at which it diffuses?

..... [1]

(b) Helium is a gas used to fill balloons. It is present in the air in very small quantities. Diffusion can be used to separate it from the air.

Air at 1000 °C is on one side of a porous barrier. The air which passes through the barrier has a larger amount of helium in it.

(i) Why does the air on the other side of the barrier contain more helium?

..... [1]

(ii) Why is it an advantage to have the air at a high temperature?

.....

..... [1]

(Q13)

When a small quantity of a strongly smelling gas such as ammonia is released into the air, it can be detected several metres away in a short time.

(a) Use the kinetic molecular theory to explain why this happens. *[2]*

. . . . . .

. . . . . .

. . . . . .

. . . . . .

(b) State and explain how the time taken to detect the gas changes when the temperature is increased. *[2]*

. . . . . .

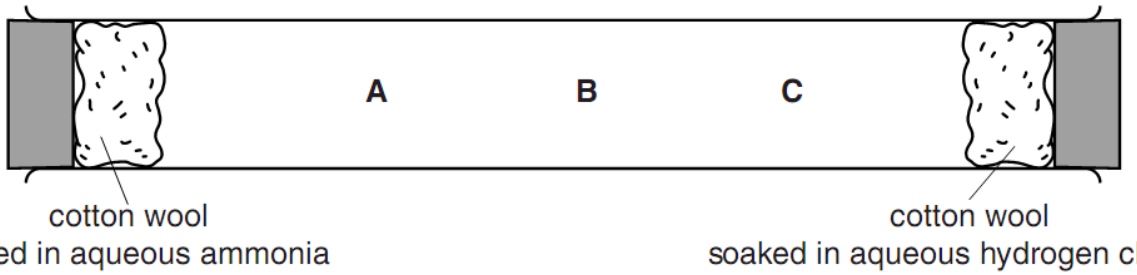
. . . . . .

. . . . . .

. . . . . .

(Q14)

Two pieces of cotton wool, soaked separately in aqueous solutions of ammonia (M_r: 17) and hydrogen chloride (M_r: 36.5) are placed at opposite ends of a tube, as shown in the diagram.



After a few minutes, a white solid is produced on the inside of the tube.

(i) Name the process by which the gases from the two solutions move along the tube.

..... [1]

(ii) Name and give the formula of the white solid.

name .....

formula ..... [1]

(iii) Nearest to which position, **A**, **B** or **C**, is the white solid formed?
Explain your answer.

position .....

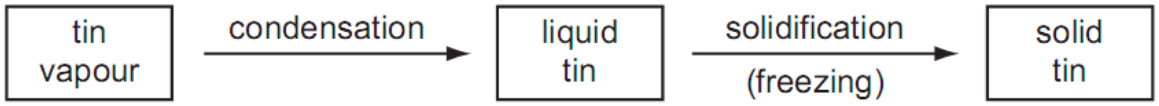
explanation .....

.....[3]

Worksheet No 6 Date

Q15)

The diagram shows the changes of state when tin vapour is cooled slowly to room temperature.



Explain what happens to the arrangement and motion of the atoms during these changes.

.....

.....

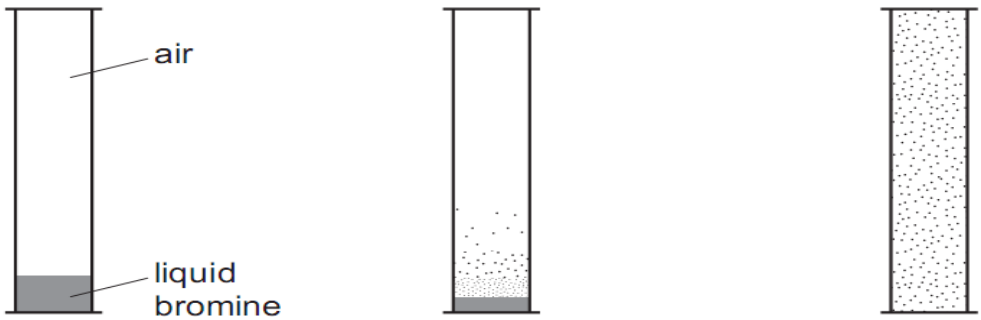
.....

.....

..... [4]

Q16)

A teacher placed a small amount of liquid bromine in the bottom of a sealed gas jar of air. After two minutes brown fumes were seen just above the liquid surface. After one hour the brown colour had spread completely throughout the gas jar.



Use the kinetic particle theory to explain these observations.

.....

.....

..... [3]

Q17)

(a) Different gases diffuse at different speeds.

(i) What is meant by the term *diffusion*?

.....

..... [1]

(ii) What property of a gas molecule affects the speed at which it diffuses?

..... [1]

(b) Helium is a gas used to fill balloons. It is present in the air in very small quantities. Diffusion can be used to separate it from the air.

Air at 1000 °C is on one side of a porous barrier. The air which passes through the barrier has a larger amount of helium in it.

(i) Why does the air on the other side of the barrier contain more helium?

..... [1]

(ii) Why is it an advantage to have the air at a high temperature?

.....

..... [1]

St. Anthony's High School Faisal Town Lahore
English Worksheet 2025
Class: 8C

WORKSHEET 1

INSTRUCTIONS:

Answer the given questions according to your Cambridge board pattern.

Read **Text** and answer **Question 1** and **Question 2** on the assignment sheet.

The Mysterious Package

One rainy afternoon, Sarah discovered a small brown package at her doorstep. It had no address, no name, just a delicate white ribbon tied around it. Curious, she brought it inside and placed it on the kitchen table. Her mind raced with possibilities—was it from her grandmother who always sent surprise gifts? Or could it be something she had ordered and forgotten about?

When she finally opened it, there was only a note inside that read: "To the one who still believes." There was nothing else. No explanation, no signature. For the rest of the day, Sarah couldn't focus on anything else. Who had sent it? Why her? What was she supposed to believe in?

Question 1:

1. What did Sarah find at her doorstep?
2. What did the package look like?
3. What was inside the package?
4. Where did Sarah place the package after bringing it inside?

Question 2:

1. Why do you think the package had no address or name?
2. What can we infer about Sarah's personality from her reaction to the package?
3. Why might the note say, "To the one who still believes"?
4. How might Sarah feel after reading the note? Why?

Descriptive Writing Topic:

Note: Students must describe vividly using sensory details, adjectives, and imagery.

1.A Rainy Day in the City

Describe the sights, sounds, smells, and feelings of a busy city during heavy rainfall.

St. Anthony's High School Faisal Town Lahore
English Worksheet 2025
Class: 8C

WORKSHEET 2

INSTRUCTIONS:

Answer the given questions according to your Cambridge board pattern.

Read **Text** and answer **Question 1** and **Question 2** on the assignment sheet.

The Desert Race

Amir had trained for six months for the toughest race of his life—running 100 kilometers across the scorching desert. The heat was unbearable, and his water supply limited. Every grain of sand seemed like a mountain under his feet. At kilometer 75, his legs screamed for rest, but he knew he had to keep going. His younger sister, who had battled cancer and never gave up, was his source of strength. "If she could fight that, I can finish this," he thought, pushing himself beyond his limits.

When Amir crossed the finish line, tears filled his eyes. Not from the pain, but from pride and relief. He had done it—for himself, and for her.

Question 1:

1. How long was the race Amir participated in?
2. What made the race particularly difficult?
3. At which kilometer did Amir feel exhausted?
4. What inspired Amir to continue the race?

Question 2:

1. What does the passage suggest about Amir's character?
2. Why do you think Amir cried at the finish line?
3. What does the desert symbolize in Amir's journey?
4. How does the memory of his sister influence his actions?

Describe the sights, sounds, smells, and feelings of a busy city during heavy rainfall.

2. The Most Peaceful Place You've Ever Visited
Paint a picture of a place that made you feel calm and safe—maybe a beach, garden, library, or mountain.

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English Worksheet 2025
Class: 8C

WORKSHEET 3

INSTRUCTIONS:

Answer the given questions according to your Cambridge board pattern.

Read **Text** and answer **Question 1** and **Question 2** on the assignment sheet.

The Digital Dilemma

Ella loved social media. Every meal she ate, every place she visited, and every outfit she wore had to be posted online. Her followers grew, and so did her anxiety. She began to measure her worth in likes and comments. Slowly, she noticed she was spending less time with her family and more time staring at a screen.

One evening, her grandmother asked, "When will you post about real life, not just pictures?" Ella laughed it off, but the question lingered. She started to wonder: was she really living, or just performing?

Question 1:

1. What did Ella enjoy doing on social media?
2. What effect did social media have on Ella's anxiety?
3. Who asked Ella a thought-provoking question?
4. What question did Ella's grandmother ask her?

Question 2:

1. What can be inferred about Ella's relationship with her family?
2. How might social media have changed Ella's understanding of self-worth?
3. What is the message behind her grandmother's question?
4. What might Ella be thinking after her grandmother's remark?

Descriptive writing topic:

A Room That Reflects Someone's Personality

Describe a bedroom, study, or workspace that tells a lot about the person who uses it.

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English Worksheet 2025
Class: 8C

WORKSHEET 4

INSTRUCTIONS:

Answer the given questions according to your Cambridge board pattern.

Email Writing Topic

Your school recently organized a Science and Technology Fair where students from different grades presented their innovative projects. You took part in the event and had a memorable experience. Your English teacher has asked you to write an email to your friend who could not attend the event.

Write an email to your friend. In your email:

- Describe what the Science and Technology Fair was like.
- Explain your own project and how it was received by the judges and visitors.
- Say what you learned from the event and how it inspired you.

Special Cambridge-Style Instructions:

- Begin your email with Dear [Friend's Name].
- Use an informal, friendly tone, as you are writing to a friend.
- Write about 150–200 words.
- You should not include any addresses.
- Make sure your email is well-organized (opening, main body, closing).
- End your email appropriately (e.g., Best wishes, Yours, or Take care) followed by your name.

Narrative Writing Topic:

Students must tell a story with a clear beginning, middle, and end, using dialogue and plot development.

1. **The Day Everything Went Wrong**

Write a story about a day when a series of unexpected problems led to a surprising ending.

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English Worksheet 2025
Class: 8C

WORKSHEET 5

Report Writing Topic: School Canteen Facilities and Food Quality

Text A: A Student Survey on the Canteen

Recently, the Student Council conducted a survey involving 150 students from different year groups about the school canteen. While 40% of students said the food was affordable, many expressed concerns about hygiene and food variety. Several students mentioned that the canteen was overcrowded during break time, and the seating area was often unclean.

Students suggested introducing healthier food options such as fruits, salads, and sandwiches. Others recommended a weekly feedback system where students could suggest new items or improvements.

Text B: Interview with the Canteen Manager

Mr. Rehman, the canteen manager, said, "We are doing our best to meet the needs of all students. Our team serves over 400 students daily. It's not always easy to maintain cleanliness when students leave their tables in a mess."

He added, "We are planning to expand the menu next term and include more nutritious options. We also encourage students to cooperate by using the bins and following the queue system."

Mr. Rehman believes a joint effort between staff and students will lead to real improvement.

Report Writing Task

Write a report for your school principal about the current state of the canteen and how it can be improved.

- Use both Text A and Text B to help you write your report.
- Include your own ideas to support your points.
- Write between 150–200 words.
- Present factual information in a formal tone.
- Use clear headings or bullet points where necessary.

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English Worksheet 2025
Class: 8C

WORKSHEET 6

Task: Idiom Exploration Activity

Instructions for Students:

Below are 20 challenging idioms. Your task is to:

1. Find the meaning of each idiom using a dictionary or online idiom resource.
2. Write one original sentence using each idiom correctly.
3. Create a short example or situation (real or fictional) where the idiom could naturally be used.
4. Complete your work in a table format or in a neat, numbered list.

Idioms

1. Burn the midnight oil
2. Jump on the bandwagon
3. Bite the bullet
4. Throw in the towel
5. Put all your eggs in one basket
6. Cry over spilt milk
7. Kick the can down the road
8. Hit the nail on the head
9. Let sleeping dogs lie
10. The ball is in your court
11. Back to the drawing board
12. Steal someone's thunder
13. Bark up the wrong tree
14. Burn your bridges
15. Fly off the handle
16. The tip of the iceberg
17. Be in hot water
18. A blessing in disguise
19. Cut corners
20. Add fuel to the fire

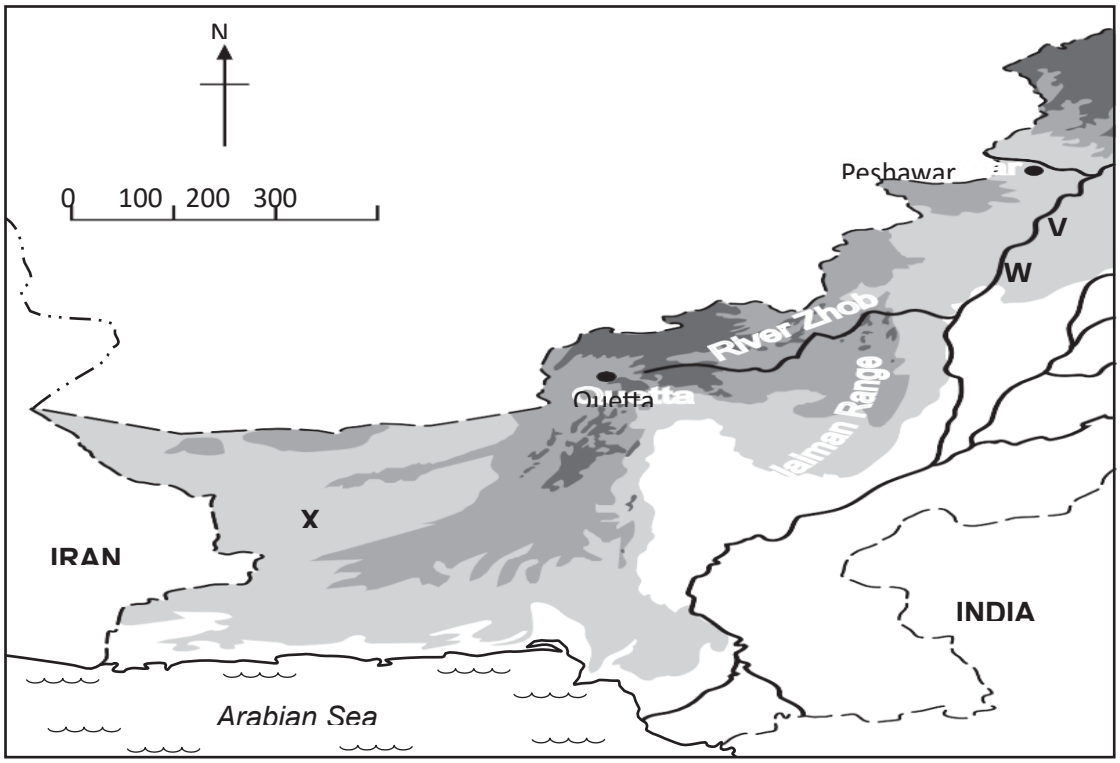
St. Anthony's high School Faisal Town Lahore.

Summer vacations Assignments. (2025)

Class: 8C
Subject: Geography

Assignment:1

Q;1a. Study the map showing the natural topography of southern and western Pakistan



i. Using fig describe the location of the Sulaiman Range. [4]

ii. Describe **three** features of the Salt Range. [3]

iii. Name **two** minerals that can be obtained from the Salt Range.
And suggest the two uses.
[4].

b. Explain **two** ways in which the natural topography of the Salt Range makes mineral exploitation difficult. You should develop your answer. [4]

c. Define the following terms:
a. Arid climate b. Monsoon c. Coastal Climate

d. Lowland Climate
[4]

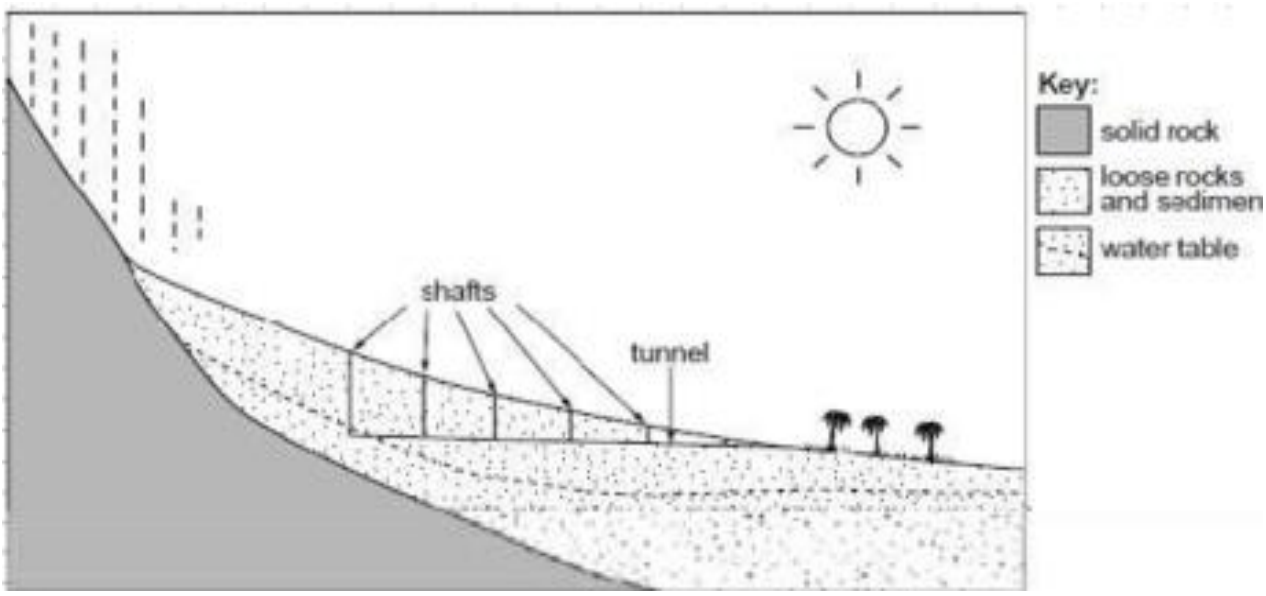
d. A. Northern mountains should be developed for tourism to promote economic growth of the country.

B. It is more important to develop the Indus plain than Northern mountains

Which statement you agree with more.Give reasons for your answer. [6]

Assignment:2

Q;1. a. Study Fig. 4 which shows an irrigation system.



i. Name the irrigation system shown in Fig. 4. [2]

ii. Name an area of Pakistan where it is used. [2]

iii. Explain how this system provides water for agriculture in this area. [4]

iv. Name a fruit crop grown in this area. [2]

Q:2 Describe how the variation in climatic zones in Pakistan affects:
a. The types of crops grown
b. The kind of houses people live in
c. Seasonal migration and tourism [5]

Q;3. In what ways does the hot desert climate affect agriculture and settlement patterns in southern Pakistan? [4]

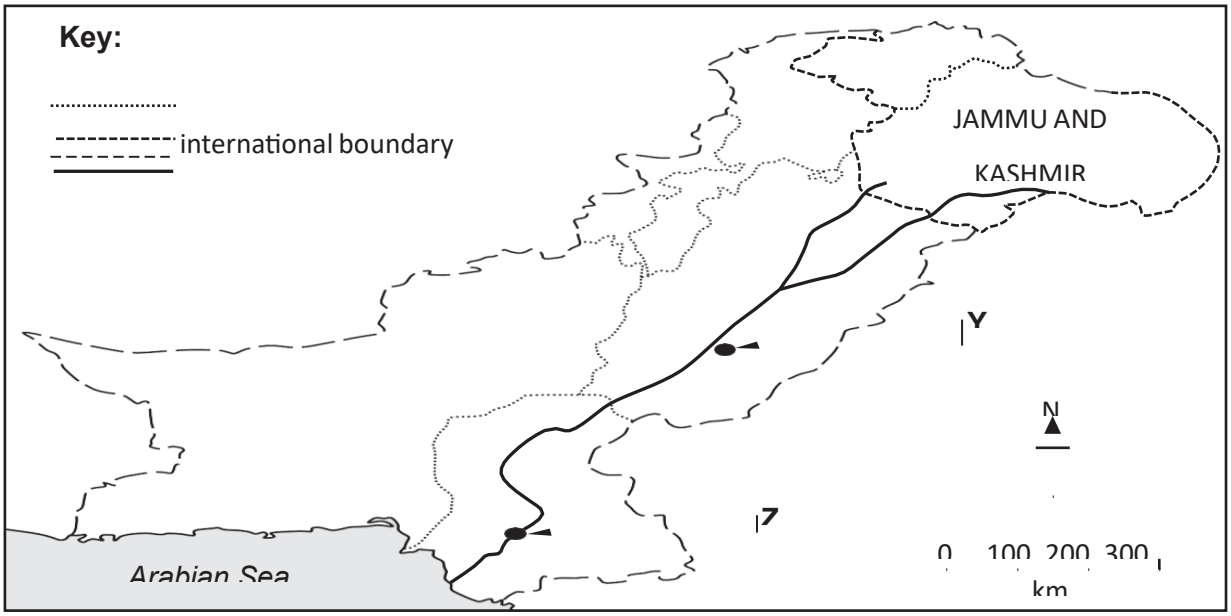
Q;4. A. The forming potential of the Balochistan plateau should be fully utilized to provide food for the population.

B. The Government should invest more money to provide infrastructure facilities to Balochistan.

Which statement do you agree with more. Give reasons for your answer. [6]

Assignments:3

1. Study the map of Pakistan.



a. Label the province-level areas in the correct locations using the letters fromthe list below.

letter	province-level area
A	Baluchistan
B	FATA
C	Northern Areas/Gilgit-Baltistan
D	Kyber Pakhtunkhwa (KPK)
E	Punjab
F	Sindh

[6]

b. Name the cities Y and Z.
[2]

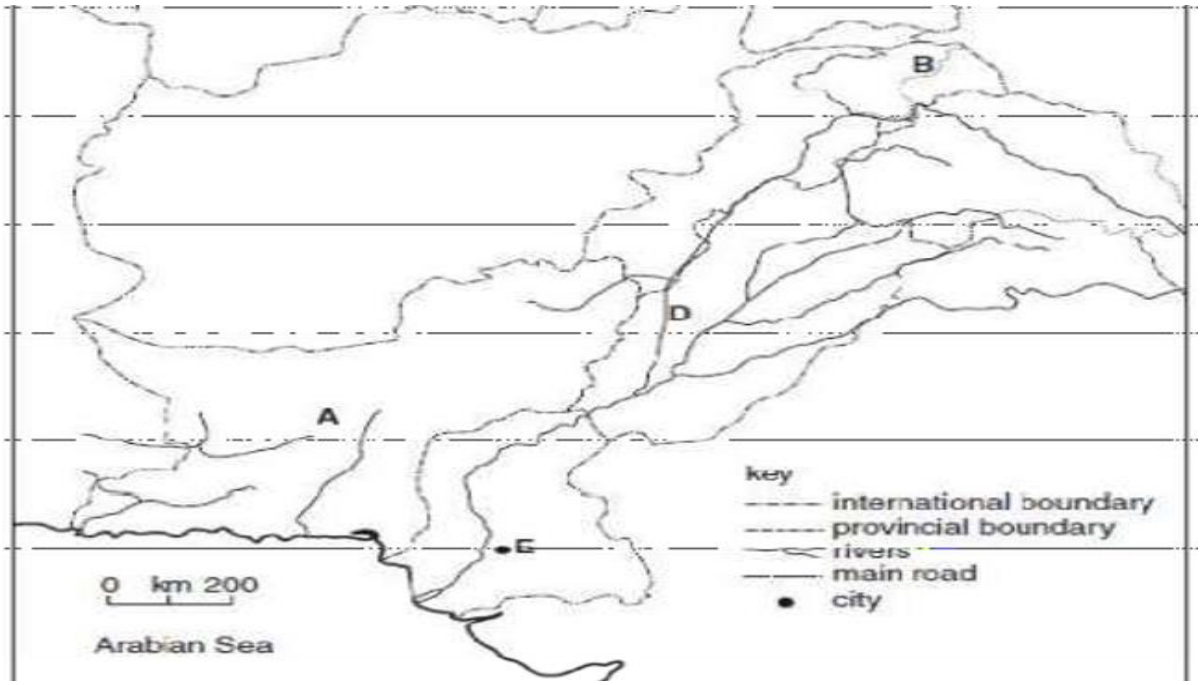
2. Describe the characteristics of a floodplain. [3]

3. State four ways that land on a floodplain is used. [4]

C. Evaluate the extent to which the natural topography of Pakistan's mountain regions is a greater challenge for economic development than the natural topography of its plateau regions. Give reasons to support your judgement and refer to examples you have studied. You should consider different point of view in your answer. [6].

Assignment:4

Study the fig:



On your answer sheet name.

province A, the main road B, country C, river D, city E. [5]

a. Describe the natural topography of the northern regions. [3]

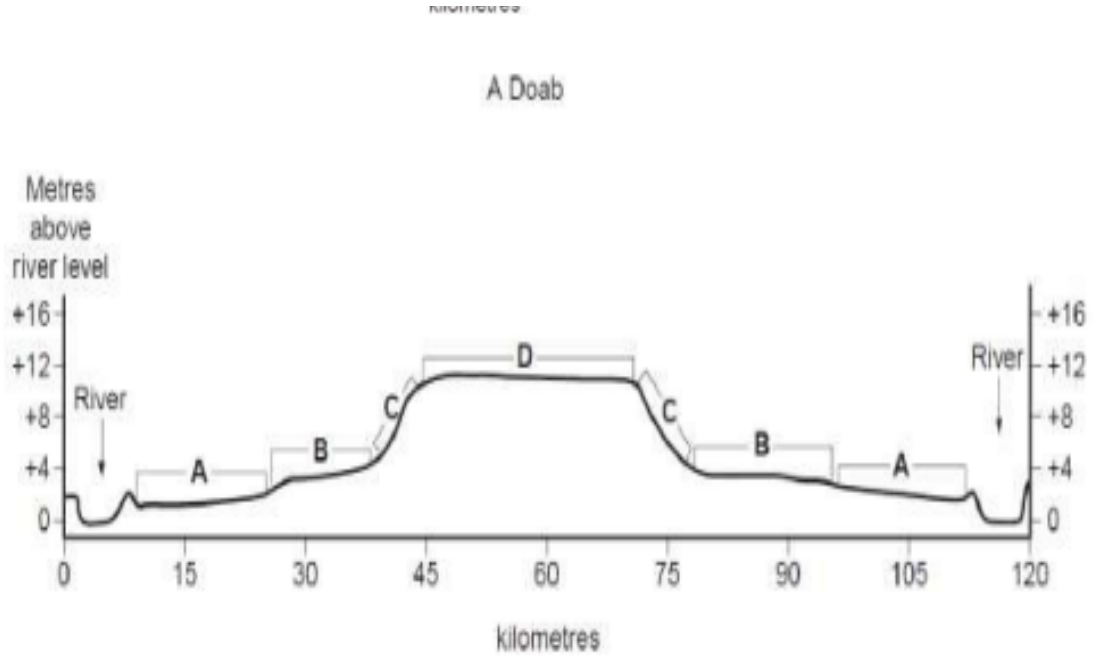
b. Explain two impacts of deforestation in the Northern Mountains on the natural environment. You should develop your answer. [4]

c. Describe the importance of the Northern Mountains to Pakistan. [4]

d. State the differences between barrages and dams. [4]

Assignment:5

Q: 1. For each of the following, give the name of the physical feature and describe its main physical characters.



A. ……
[3]

B. ……
[3]

C. ……
[2]

D ……..
[2]

Q:2 a. Describe the natural topography of the northern regions. [3]

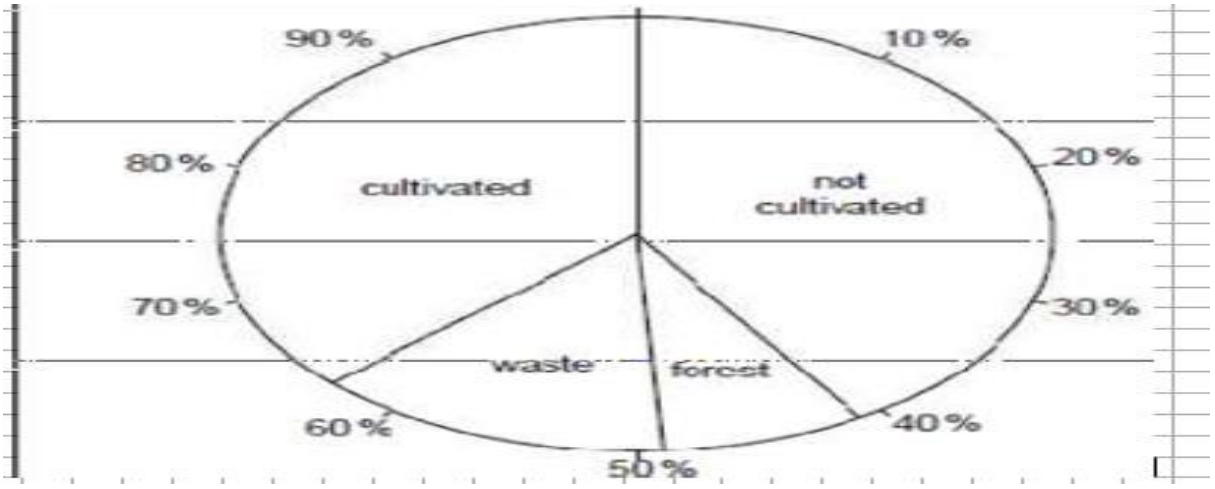
b. Explain two impacts of deforestation in the Northern Mountains on the natural environment. You should develop your answer. [4]

c. Describe the importance of the Northern Mountains to Pakistan. [4]

d. State the differences between barrages and dams. [4]

Assignment:6

Q:1Study Fig. which shows the results of a land-use survey in Pakistan in 2008.



i. What percentage of land is cultivated? [1]

ii. What percentage of land is waste? [1]

iii. Explain how soils are damaged by water-logging and salinity. [4]

iv. Explain three reasons, other than by water-logging and salinity, why over halfthe land was not cultivated when the survey was made.

Q;2 a. Explain **two** factors that affect temperature in Pakistan. You should develop your answer. [4]

b. Define 'drought'.
[2]

c. State **two** effects of drought on the natural environment of Pakistan.
[2]

d. Describe the benefits and problems of cold climates for people in Pakistan.
[2]

e. Describe how climate effect the economic activities in Pakistan. [3]

Q:3 A. The Thar desert should be reclaimed through canal irrigation to increase production of food.

B. The government should set up coal-field thermal power plants rather than use the land for farming.

Which statement do you agree with more? Give reasons for to support your answer.
[6]

Worksheet 1

Shah Wali Ullah.

Question 1

Source A: a statement of Shah Wali Ullah,

> "It took many years to cleanse Arabia of its "false idols." It will take many more to cleanse Islam of its new false idols— sectarianism, bigotry, fanaticism and ignorance— worshiped by those who have replaced Prophet Muhammad's (pbuh) original vision of tolerance and unity with their own ideals of hatred and discord. But the cleansing is inevitable, and the tide of reform cannot be stopped."

Source B: a portrait of Shah Wali Ullah

a) **With the help of source, A describe the mission of Shah Wali Ullah. [3]**
b) **What does source B tell us about Shah Wali Ullah? [5]**
c) **Why did Shah Wali Ullah wish to revive Islam in the sub-continent? (7)**
d) **How important was Shah Wali Ullah in the spread of Islam in the sub-continent before 1850? Explain your answer. [10]**

Question 2

a) **Who was Shah Wali Ullah? [4]**
b) **Describe the services/achievements of Shah Wali Ullah. [7]**
c) **Was the work of Shah Wali Ullah the most important factor in the revival of Islam in the sub-continent during the 17th and 18th century? Give reasons for your answer. [14]**

Worksheet 2

Haji Shariat Ullah

Question 1

Source A: a description of Haji Shariat Ullah's mission about the poor Bengali Muslims,

> "While travelling extensively in Bengal, he saw the woes of Muslim peasants and artisans inhumanly exploited by the Hindu Zamindars and Mahajans/money lenders. This led to his commitment to liberate the people from these problems through the path of revolution. He garnered support from farmers, artisans and the people from different classes. He successfully launched a campaign called the Faraizi Movement."

Source B: the poor Bengali family of East Bengal.

a) **With reference to source A, what were the feelings of Haji Shariat Ullah about the poor Bengali Muslims? [3]**
b) **What does source B tell us about the ambitions of Haji Shariat Ullah during the 19th century in East Bengal? [5]**
c) **Why did Haji Shariat Ullah start his Faraizi Movement? [7]**
d) **Why were there attempts for the revival of Islam in India during 18th and 19th centuries? [10]**

Question 2

a) Who was Haji Shariat Ullah? [4]
b) What was the Faraizi Movement? [4]
c) Who were Zamindars? [4]
d) Who was Titu Mir? [4]
e) Why did Haji Shariat Ullah start his Faraizi Movement? [7]

Worksheet 3

Syed Ahmed Shaheed Brailvi

Question 1

Source A: a statement of the view about *mujahideen*.

The *mujahideen* were educated with both theological doctrines and physical training sessions. Syed Ahmad organized wrestling, archery training, and shooting competitions. The *mujahideen* also repeated several Islamic anthems. One such popular anthem has survived, known as "Risala Jihad". On 21 December 1826, Syed Ahmad and his 1,500 followers clashed with 4,000 Sikh troops in the battle of Akora Khattak and obtained a significant victory. On 11 January 1827, allegiance was sworn on his hand and he was declared *Caliph* and *Imam*.

Source B: a scene of the battle of Balakovo, May 1831.

a) **Describe the training of *mujahideen* and success in the battle of Akora Khattak. [3]**
b) **Describe the scene of the battlefield. [5]**
c) **Why did Syed Ahmed Shaheed Barelvi conduct a Jihad against the Sikhs in the early 19th century? [7]**
d) **Why did Syed Ahmad Shaheed Barelvi start his Jehad Movement and the mujahdineen movement he stated? [10]**

Question 2

a) **Who was Syed Ahmed Shaheed? [4]**
b) **Why did Syed Ahmed Shaheed wish to revive Islam in the Sub-Continent? [7]**
a) **Was the work of Syed Ahmed Shaheed the most important factor in the revival of Islam in the sub-continent during the 17th & 18th centuries? Give reasons for your answer. [14]**

Worksheet 4

Question 1

a) **Who was Shah Wali Ullah? [4]**

b) **Why did Haji Shariat Ullah start his Faraizi Movement? [7]**

c) **Which of the following was the most important in the spread of Islam during the seventeenth and 18th century: -?**

   i. **Shah Wali Ullah**

   ii. **Syed Shaheed Brailvi**

   iii. **Haji Shariat Ullah [14]**

Question 2

a) **Describe the Jehad Movement. [4]**

b) **How important was Shah Wali Ullah in the spread of Islam in the sub-continent before 1850? Explain your answer. [7]**

c) **Was the work of Shah Wali Ullah the most important factor in the revival of Islam in the sub-continent during the 17th and 18th century? Give reasons for your answer. [14]**

Question 3

a) **What was *mujahideen* movement started by Syed Ahmad Shaheed Brailvi? [4]**

b) **Why did Syed Ahmed Shaheed have such a major influence on the revival of Islam in the Sub-Continent? [7]**

c) **Was the work of Syed Ahmed Shaheed Brailvi the most important factor in the revival of Islam in the sub-continent during the 17th and 18th centuries? Give reasons for your answer. [4]**

Worksheet 1
Topic 1: God as creator

Question 1

a) **Read the following passage and then answer the questions**

Genesis 2:9, NRSVA

9 Out of the ground the LORD God made to grow every tree that is pleasant to the sight and good for food, the tree of life also in the midst of the garden, and the tree of the knowledge of good and evil.

i. **State the two states of the trees that God made in the garden of Eden. [2]**
ii. **State the two types of trees that God planted in the middle of the Garden of Eden. [2]**

b) **Outline the command of God that he gave to Adam. [4]**
c) **State how God made a woman in the story of creation in the book of Genesis. [4]**
d) **Describe the reaction of Adam when he saw the woman. [8]**

[Total: 20]

Question 2

a) **Describe what happened in the account in Genesis when the Lord could not find a helper for the man. [6]**
b) **Explain why this passage might not be taken literally by some Christians. [6]**
c) **Assess the view that Genesis has nothing to teach Christians about the creation of humanity. [8]**

[Total: 20]

Question 3

a) **What literary structures or patterns can be observed in the creation account of Genesis 1? [6]**
b) **How do Genesis 1 and Genesis 2 differ in their portrayal of the creation of humankind? [6]**
c) **Genesis 1-3 presents two different creation accounts. How should these be understood in relation to each other? [8]**

[Total: 20]

Worksheet 2

Question 1

a) **Read the following passage and then answer the questions**

Genesis 3:6, NRSVA

So when the woman saw that the tree was good for food, and that it was a delight to the eyes, and that the tree was to be desired to make one wise, she took of its fruit and ate; and she also gave some to her husband, who was with her, and he ate.

i. **State who persuaded the woman to eat the fruit. [1]**
ii. **Outline how the woman was persuaded to eat the fruit. [2]**
iii. **State three punishments that God gave as a result of this event. [3](iii)**

b) **Explain what this passage might teach Christians about God's relationship with humanity. [6]**
c) **Assess the view that the story of the fall has no relevance to Christians today. [8]**

[Total: 20]

Question 2

a) **What is the significance of Adam naming the animals in Genesis 2:19-20? [6]**
b) **What theological significance does the phrase "in the image of God" (Genesis 1:27) have in Christian doctrine? [6]**
c) **Does Genesis 3 suggest that the Fall was inevitable? Support your answer with evidence. [8]**

[Total: 20]

Question 3

a) **Why was the seventh day made holy, and what implications does this have for later biblical teachings? [6]**
b) **Compare and contrast the consequences of the Fall for Adam, Eve, and the serpent. [6]**
c) **How does Genesis 1-3 provide a framework for understanding the Christian doctrine of salvation? [8]**

[Total: 20]

Worksheet 3

Question 1

a) **Read the following passage and then answer the questions:**
   Genesis 2:15, NRSVA
   The LORD God took the man and put him in the garden of Eden to till it and keep it.
   i. **State the command that God gave to man in the garden of Eden. [2]**
   ii. **State the feeling of Adam in the garden of Eden when he gave names to all creature. [1]**
   iii. **State the reaction of Adam when God brought woman before Adam. [3]**
b) **Explain the importance for Christians of the creation story in Genesis. [6]**
c) **Assess the creation story of Genesis and punishments given by God after the fall of Man. [8]**

[Total: 20]

Question 2

a) **Whether the Genesis accounts of creation and the fall should be taken literally. [6]**
b) **The extent to which biblical accounts of creation and modern science are compatible. [6]**
c) **Whether Christians today are doing enough to care for the environment. [8]**

[Total: 20]

Question 3

a) **Why do Adam and Eve sew fig leaves together in Genesis 3:7, and how does this action symbolize a deeper spiritual truth? [6]**
b) **If Adam and Eve had not sinned, would they have lived forever? Justify your answer using textual evidence. [6]**
c) **What is the significance of God making garments of skins for Adam and Eve (Genesis 3:21)? [8]**

[Total: 20]

St Anthony's High School Faisal Town Lahore

Name …… Admission No…….

Subject: Islamiyat. **Summer Vacation Worksheet 1 2025** **Class 8 C**

Q1: (a) Describe how the four sources of Islamic Law work with each other in law making.
(b) To what extent is the use of ijma and qiyas more important today than in the past?

Q2. (a) 2 (a) Give an account of the compilation of Hadiths during the period of the Successors of the Successors, referred to as the golden age of Hadith compilation.

(b) How did the preservation of the Hadiths help Islam develop?

Q3. (a) Choose three events from the Prophet's life that demonstrate his moral character, and write in detail about them.

(b) Which of these events do you think is the most relevant as a lesson for Muslims today?

St Anthony's High School Faisal Town Lahore

Name …… Admission No…….

Subject: Islamiyat. **Summer Vacation Worksheet 2 2025** **Class 8 C**

Q1: (a) Describe the different ways that the Prophet (pbuh) received revelation from God.

(b) Why do you think that the revelation was sent to someone who could not read or write?

Q2. (a) Describe the method used to make a judgement by analogy (qiyas) using the Qur'an and Hadith. Give examples to support your answer.

(b) Why do you think the Prophet (pbuh) encouraged the use of personal reasoning amongst his Companions?

Q3(a) Write an account of:

- the reasons given by scholars for compiling Hadith collections, and;
- the checks made to confirm their authenticity.

(b) What is the purpose of having false Hadiths in Hadith collections?

St Anthony's High School Faisal Town Lahore

Name …… Admission No…….

Subject: Islamiyat. **Summer Vacation Worksheet 3 2025** **Class 8C**

Q1: (a) Give an account of how the Quran developed into book form?

(b) What is the significance to Muslims today of having the Quran in the form of Book or digitally available in phones

Q2. (a) Write the significance of the Quran as basis of though and action in Islam..

(b) The Quran should not have been compiled in written form because it did not take place during the Prophet's lifetime. Agree or disagree with this statement ,giving reasons for your answer.

Q3. (a) Describe with the help of examples how Quran provides guidance about the fundamental Laws of Islam.

(b) Explain the significance of the Quran being revealed to humankind.

St Anthony's High School Faisal Town Lahore

Name …… Admission No…….

Subject: Islamiyat. **Summer Vacation Worksheet 4 2025** **Class 8C**

Q1: (a) The Sunnah is often used with the Quran as a primary source of Islamic Law. Describe the ways in which they are used together.
(b) "The Quran is not relevant to Muslims now as it was 1400 years ago." Give your 4 reasons to agree or disagree with this statement.

Q2. (a) What is Ijma and Qiyas according to Quran and how useful are Ijma and Qiyas when dealing with the modern issues?

(b) Why do you think some scholars do not favour the use of Qiyas?.

Q3.Research on this Quran passage.

(a) What is the main theme of Sura 41:37 ?

(b) Why is this theme important for Muslims today?

1)Among his signs are the night and the day, and the sun and the moon. Adore not the sun and the moon, but adore Allah, who created them, if it is Him you wish to serve.

St Anthony's High School Faisal Town Lahore

Name …… Admission No…….

Subject: Islamiyat. **Summer Vacation Worksheet 5 2025** **Class 8 C**

Q1: (a) Briefly describe the main theme(s) in passage.
(b) Briefly explain the importance of the themes in a Muslim's life today.
Sura 2.21-22

> 21 O people! Adore your Guardian-Lord, who created you and those who came before you, so that you may have the chance to learn righteousness, 22. Who has made the earth your couch, and the heavens your canopy, and sent down rain from the heavens, and by it brought forth fruits for your sustenance, then do not set up rivals to Allah, when you know.

Q2. (a) From passages you have studied from the Quran , write about Allah's relationship with mankind.

(b) Explain the significance of the Quran being revealed to humankind..

Q3. (a) Describe the main theme in passage .

(b) Briefly explain the importance of the themes in a Muslim's life today.

Allah's relationship with the created world

Sura: 1

1 in the name of Allah, most gracious, most merciful. 2. Praise be to Allah, the cherisher and sustainer of the worlds, 3. Most gracious, most merciful, 4. Master of the day of judgment. 5 You we worship, and your aid we seek 6. Show us the straight way. 7 The way of those to whom You have given your grace, not those who earn your anger, nor those who go astray

St Anthony's High School Faisal Town Lahore

Name …… Admission No…….

Subject: Islamiyat. **Summer Vacation Worksheet 6 2025** **Class 8 C**

Q1: Research on the following Hadith:

(a) Describe teaching about what Muslims believe

(b) Explain how Muslims can put these teachings into action.

(1)Whosoever of you sees an evil action, let him change it with his hand, and if he is not able to do so then with his tongue, and if he is not able to do so then with his heart, and that is the weakest of faith

2) It was said: O Messenger of Allah, who is the most excellent of men? The Messenger of Allah (may Allah bless him and give him peace) said 'The believer who strives hard in the way of Allah with his person and his property.

Q2. (a) What are the different types of hadiths? How is each Hadith classified into the different types?

(b) Explain the importance of hadith-i-Qudsi?

Q3. (a) Give an account of how the Prophet's Hadiths have been a source of guidance to Muslims in putting their faith into practice. .

(b) Why do the Prophet's Hadiths link belief and action so closely?

Worksheet # 1 **Class 8C**

Name: ……. **Adm.# …….**

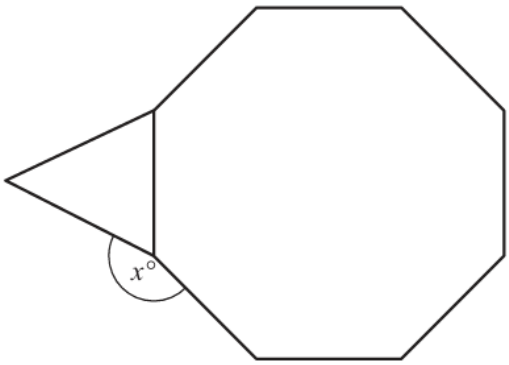
1.

NOT TO SCALE

The diagram shows part of a regular polygon.
The exterior angle is $x°$.
The interior angle is $29x°$.

Work out the number of sides of this polygon. [3]

2. The diagram shows a regular octagon joined to an equilateral triangle.



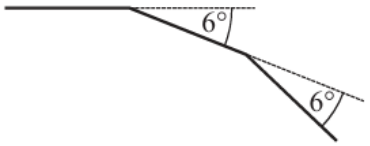
NOT TO SCALE

Work out the value of x. [3]

3. The exterior angle of a regular polygon is 36°.

What is the name of this polygon? [3]

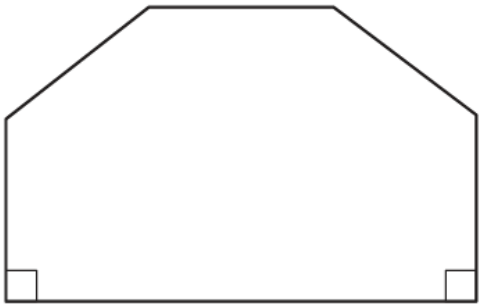
4.



NOT TO SCALE

The diagram shows two of the exterior angles of a regular polygon with n sides.
Calculate n. [2]

5.



NOT TO SCALE

The front of a house is in the shape of a hexagon with two right angles.
The other four angles are all the same size.

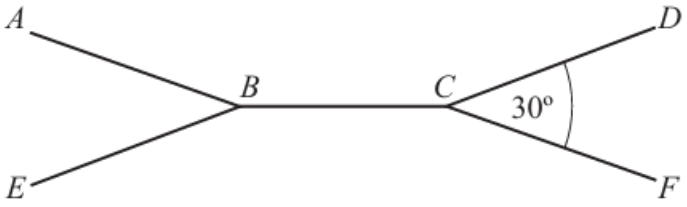
Calculate the size of one of these angles. [3]

6. **(a)** A pentagon has four angles of $2x°$ and one angle of $x°$.

Calculate the value of x.

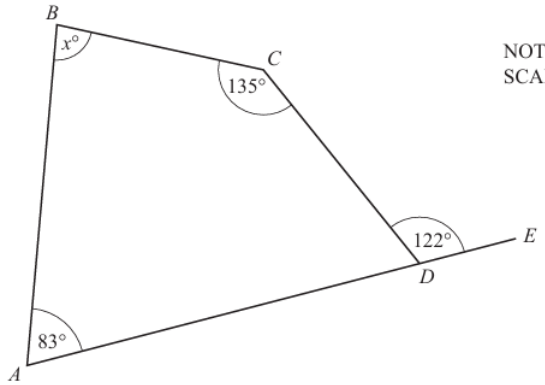
Answer $x =$ ..... [2]

(b) *ABCD* and *EBCF* are parts of two identical regular *n*-sided polygons.



7. The diagram shows quadrilateral *ABCD* with *AD* extended to *E*.
Angle $BCD = 135°$, angle $BAD = 83°$ and angle $CDE = 122°$.

Find the value of x.



NOT TO SCALE

8. In the diagram, $ABCD$ is part of a regular polygon.
Each interior angle is 165°.

(a) How many sides does this polygon have?

(b) $ABPQ$ is part of another regular polygon.
This polygon has 12 sides.
Calculate x.

Answer (*a*) .....[2]

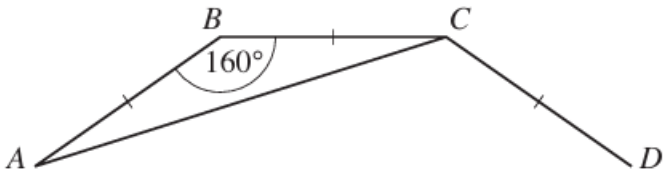
(*b*) $x =$ .....[2]

9. A regular polygon has interior angles of 160°.

(a) Calculate the number of sides of the polygon.

Answer ..... [2]

(b)



The diagram shows three sides, AB, BC and CD, of this polygon.

(i) Calculate $B\hat{A}C$.

Answer ..... [1]

(ii) Calculate $A\hat{C}D$.

Answer ..... [1]

Worksheet # 2 **Class 8C**

Name: ……. **Adm.# …….**

---

1. **(a)** Amir buys a camera for \$250 and sells it for \$200.
Calculate his percentage loss.

(b) Meera invests some money at a rate of 2% per year **simple interest**.
How many years does it take for her investment to double in value?

2. **(a)** Daniel earns \$760 each month.
He pays 15% of his earnings in tax.
Calculate the amount of money Daniel has each month after paying tax.

(b) Daniel invests \$1200 in a savings account.
The account pays simple interest at a rate of 2% per year.
Calculate the amount of money in the account after 6 years.

3. **(a)** Write 0.09 as a percentage.

(b) Evaluate 75% of $\frac{3}{4}$.

4. **(a)** Evaluate $\frac{8}{9}-\frac{6}{7}$.

(b) Express $32\frac{1}{2}\%$ as a fraction in its simplest form.

(C) Evaluate 0.3×1.5.

(d) Evaluate $\frac{1}{3} \div \frac{7}{9}$, giving your answer as a fraction in its lowest terms.

(e) By writing each number correct to one significant figure, estimate the value of
$21.86-9.64 \div 2.47$.

5. **(a)** Find the lowest common multiple (LCM) of 140 and 770.

(b) Write 540 as the product of its prime factors.

6. **(a)** Evaluate $12-6 \div 3+4$.

(b) Express 500 as the product of its prime factors.

(c) $M = 2 \times 3^2$ $N = 2^4 \times 3^2$

Find the values of p and q when

(i) $M \times N = 2^p \times 3^q$,

Worksheet # 3 **Class 8C**

Name: ……. **Adm.# …….**

---

1. **(a)** Write these numbers in order of size, starting with the smallest.

$\frac{3}{4}$ 0.83 $\frac{17}{20}$ 82% 0.8

(b) Write these fractions in order of size, starting with the smallest.

$\frac{4}{5}$ $\frac{7}{10}$ $\frac{17}{20}$

2. Insert the correct symbol $=$, $>$ or $<$ to make each statement correct.

(a) 0.6 kg ..... 60 g

(b) 15 km ..... 15 000 m

(c) $4\,m^2$ ..... $400\,cm^2$

3. Write these numbers in order of size, starting with the smallest.

4^3 9^2 $\sqrt{196}$ $\sqrt[3]{125}$

4. **(a)** Find the integers that satisfy $1 < 3x + 5 \leqslant 11$.

(b) Write down all the integers that satisfy the inequality $-\frac{3}{2} \leqslant x < 2$.

(C) Complete the following inequality with a fraction.

$$\frac{3}{4} > \ldots\ldots\ldots\ldots > \frac{1}{2}$$

(d) Write down an irrational value of n that satisfies this inequality.

$$2 < n < 3$$

5. **(a)** Express 340 000 in standard form.

(b) Evaluate $\frac{4\times 10^7}{8\times 10^{21}}$, giving your answer in standard form.

(c) $7\times 10^a - 3\times 10^{a-1} = k\times 10^a$

Find k.

Worksheet # 4 **Class 8C**

Name: ……. **Adm.# …….**

---

1. **(a)** Simplify $4c - 3(2c - 5)$.

(b) **(b)** Factorise $8 - 10y + 12x - 15xy$.

2. **(a)** Evaluate $\frac{3.5 - 1.9}{0.8}$.

(b) Evaluate $9 + 6 \div 3 - 4$.

3. Evaluate

(a) $52.3 \times 10 - 3.76 \times 100$,

(b) $20 - 8 \div 2 + 1$.

4. **(a)** By writing each number correct to 1 significant figure, estimate the value of

$$\frac{67.8 + 49.5}{0.187^2}.$$

(b) By writing each number correct to 1 significant figure, estimate the value of

$$\frac{6.044^2}{212 \times 0.304}.$$

(C) By writing each number correct to 1 significant figure, estimate the value of

$$\frac{6013 \times 0.0405}{\sqrt{8.986}}.$$

Worksheet # 5 **Class 8C**

Name: ……. **Adm.# …….**

---

1. A bag contains red balls, blue balls and green balls.
The ratio red : blue = 3 : 8 .
The ratio green : blue = 2 : 5 .
Work out the fraction of the balls that are blue.

2. A triangle has one angle of 55°.
The other two angles in the triangle are in the ratio 3 : 2 .
Calculate the size of the smallest angle in the triangle.

3. **(a)** Write the ratio 75 g : 3 kg in its simplest form.

(b) In a tennis club the ratio number of junior members : number of senior members = 7 : 10.
There are 18 more senior members than junior members.
Calculate the **total** number of club members.

4. **(a)** Some money is shared between Miriam and Nina in the ratio 2 : 3.
What percentage of the total money shared does Miriam receive?

(b) Given that $a : b = 5 : 6$ and $b : c = 3 : 8$ find $a : b : c$.

5. **(a)** Some money is shared between Ali, Ben and Carl in the ratio 5 : 3 : 2.
Ben receives $60.
How much money is shared?

(b) Express the ratio $3\frac{1}{2}$ hours : 14 minutes in the form $k : 1$.

Worksheet # 6 **Class 8C**

Name: ……. **Adm.# …….**

---

1. Write $\frac{48 \text{ minutes}}{2 \text{ hours } 18 \text{ minutes}}$ as a fraction in its simplest form.

2. A movie lasts for 1 hour 48 minutes and finishes at 10.15 pm.
Find the time it starts.

3. A plane leaves London on a flight to Dubai.

(a) The plane lands in Dubai where the local time is 17 20.
The flight time is 6 hours 50 minutes.
The local time in Dubai is 3 hours ahead of the local time in London.
Calculate the local time in London when the flight left.

(b) At one time during the flight the temperature inside the plane is 17 °C.
The temperature outside the plane is −43 °C.
Work out the difference between the inside and outside temperatures.

4. **(a)** A film starts at 22 35 and finishes at 01 20.
How long, in hours and minutes, does the film last?

(b) On 1 May, Leila starts to go swimming every day.
She swims 30 lengths of the swimming pool every day.
The swimming pool is 20 m long.
Work out the date when Leila has swum a total of 10 km.

5. The table shows information about some flights from Dubai to Mumbai.

Departs Dubai (local time)	03 30	16 10	21 55
Arrives Mumbai (local time)	08 10		02 30
Flight duration	3 hours 10 minutes	2 hours 55 minutes	3 hours 5 minutes

(a) Work out the time difference between Dubai and Mumbai.

(b) Work out the local time in Mumbai when the 16 10 flight arrives.

St. Anthony's High School Faisal Town Lahore

class 8-C

Student's Name: _____

1

Which option contains **only** apparatus that could be used to determine the volume of a small block of unknown material?

A measuring cylinder, metre rule

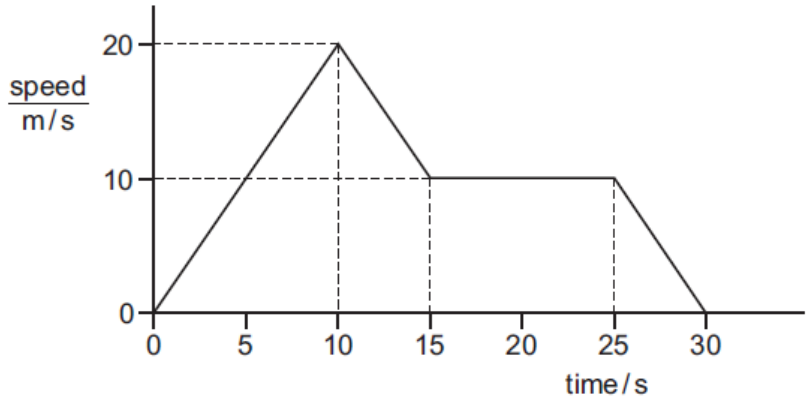
B measuring cylinder, stopwatch

C metre rule, balance

D metre rule, stopwatch

2

The graph represents the motion of a car.

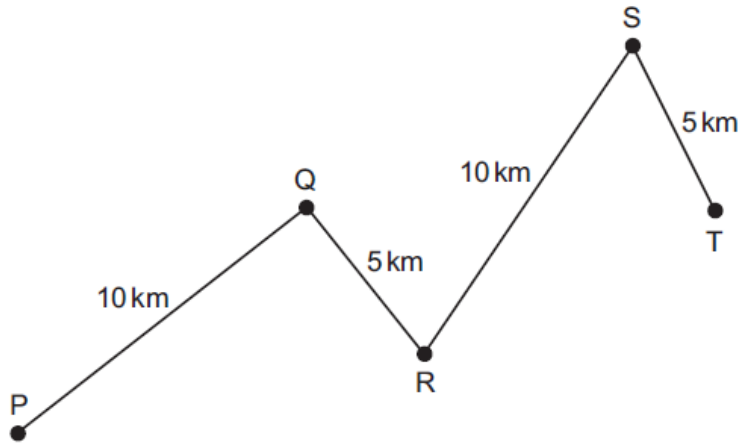


What is the distance travelled by the car while it is moving at a constant speed?

A 100 m **B** 150 m **C** 250 m **D** 300 m

3

A car travels along the route PQRST in 30 minutes.



What is the average speed of the car?

A 10 km / hour **B** 20 km / hour **C** 30 km / hour **D** 60 km / hour

4

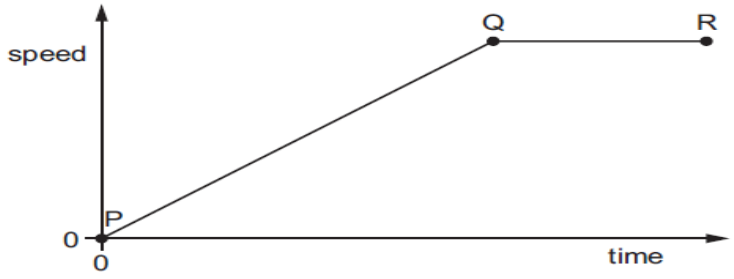
A cook wants to prepare some food to be cooked by 1.15 p.m. He uses an oven with an automatic timer that can be set to switch on and off at certain times. The oven needs to be switched on for 2 hours 10 minutes.

At which time does the oven need to switch on?

A 11.05 a.m. **B** 11.25 a.m. **C** 3.05 p.m. **D** 3.25 p.m.

5

The speed-time graph shows the motion of a car.



Which row describes the motion?

	between P and Q	between Q and R
A	accelerating	moving at constant speed
B	accelerating	not moving
C	moving at constant speed	decelerating
D	moving at constant speed	not moving

6

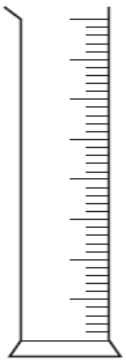
A car travels 100 km. The journey takes two hours. The highest speed of the car is 80 km/h, and the lowest speed is 40 km/h.

What is the average speed for the journey?

A 40 km/h **B** 50 km/h **C** 60 km/h **D** 120 km/h

7

The diagram shows a measuring instrument.



Which quantity is this instrument used to measure?

A area

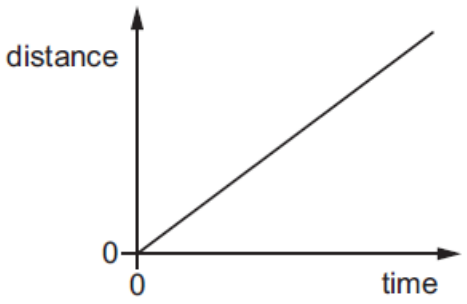
B density

C mass

D volume

8

The diagram shows the distance-time graph of an object.



Which statement describes the object?

A It is accelerating.

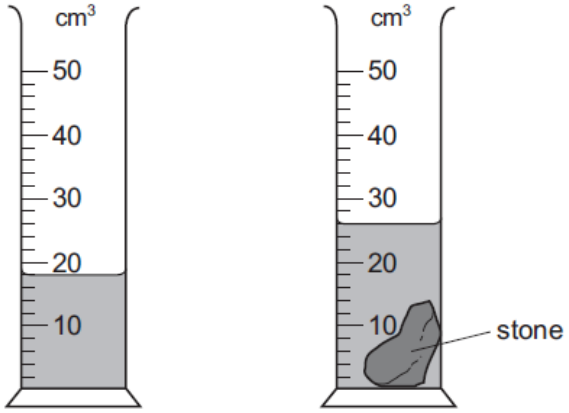
B It is moving at a constant speed.

C It is slowing down.

D It is stationary.

9

The diagram shows a measuring cylinder used to measure the volume of a small stone.



What is the volume of the stone?

A $8\,cm^3$ **B** $9\,cm^3$ **C** $14\,cm^3$ **D** $26\,cm^3$

10

The table shows the readings on a car speedometer at 5 second intervals.

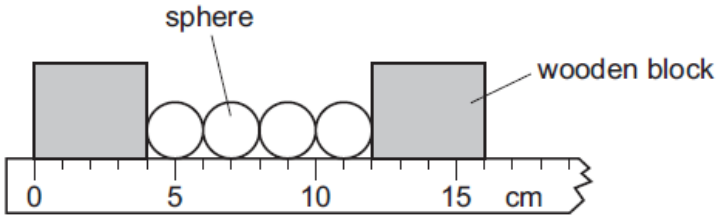
time / s	speed / km/h
0	0
5	30
10	50
15	60
20	65

Which row describes the speed and the acceleration of the car?

	speed	acceleration
A	decreasing	zero
B	decreasing	not zero
C	increasing	zero
D	increasing	not zero

11

The diagram shows four identical spheres placed between two wooden blocks on a ruler.



What is the diameter of one sphere?

A 1.0 cm **B** 2.0 cm **C** 3.0 cm **D** 4.0 cm

12

What does the area under a speed-time graph represent?

A acceleration

B average speed

C deceleration

D distance travelled

13

A student uses a measuring cylinder to measure the volume of a quantity of water.

Which action would make her result **less** accurate?

A making sure her eye is level with the water surface

B making sure the cylinder is vertical

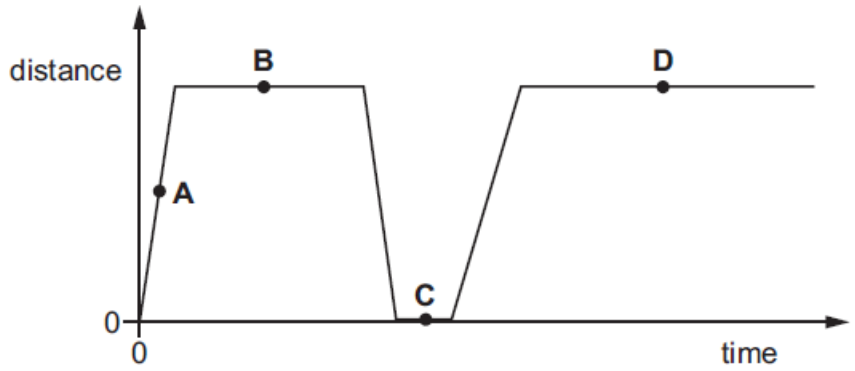
C reading the bottom of the meniscus

D using the largest measuring cylinder possible

14

The diagram shows the distance-time graph for a car.

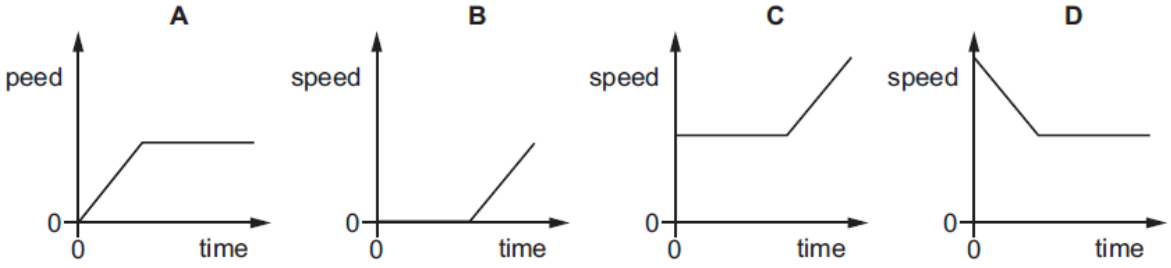
At which labelled point is the car moving with constant speed?



15

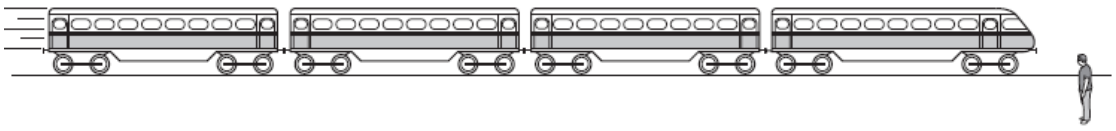
A car moves with constant speed and then constant acceleration.

Which graph is the speed-time graph for the car?



16

A man stands by a railway track.



A train travelling at 40 m/s takes 2.0 s to pass the man.

What is the length of the train?

A 20 m **B** 38 m **C** 40 m **D** 80 m

17

Diagram 1 shows a measuring cylinder containing water.

Five identical steel balls are now lowered into the measuring cylinder. Diagram 2 shows the new water level in the cylinder.

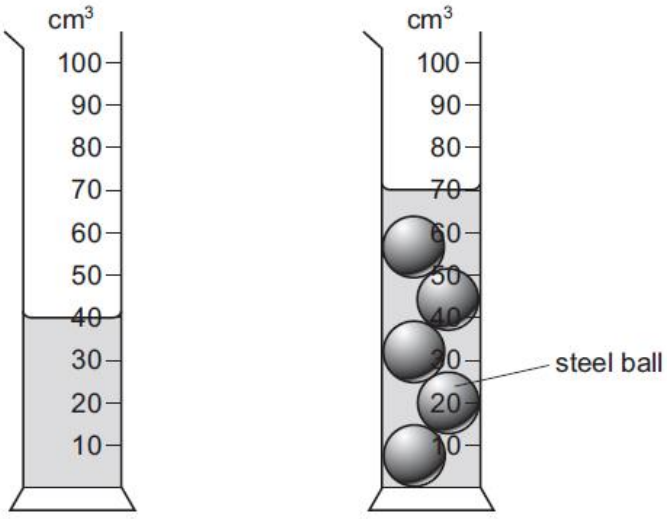


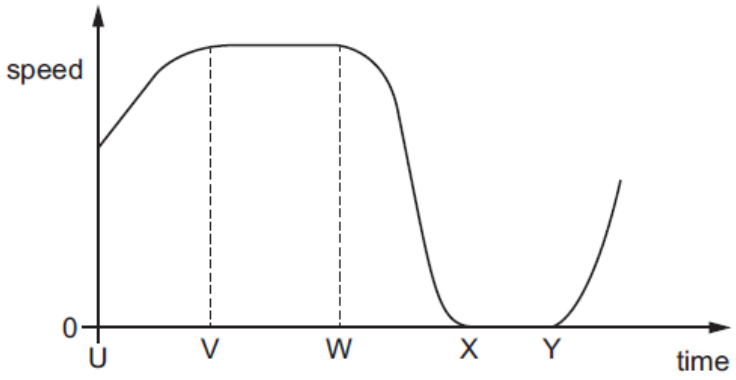
diagram 1 diagram 2

What is the volume of each steel ball?

A 6 cm^3 **B** 14 cm^3 **C** 30 cm^3 **D** 70 cm^3

18

The graph shows how the speed of a car changes with time.

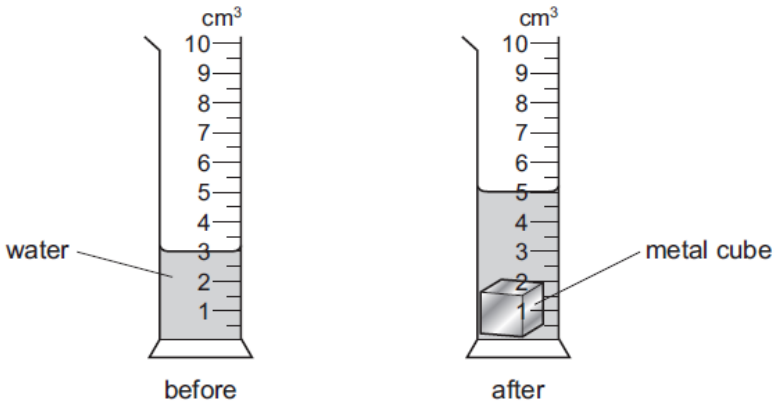


Between which two times is the car stationary?

A U and V **B** V and W **C** W and X **D** X and Y

19

The diagrams show the readings on a measuring cylinder before and after a small metal cube is added.



How many more identical cubes can be added to the cylinder, without causing the water to overflow? Do not include the cube already in the cylinder.

A 1 **B** 2 **C** 3 **D** 4

20

A car travels at various speeds during a short journey.

The table shows the distances travelled and the times taken during each of four stages P, Q, R and S.

stage	P	Q	R	S
distance travelled / km	1.8	3.6	2.7	2.7
time taken / minutes	2	2	4	3

During which two stages is the car travelling at the same average speed?

A P and Q **B** P and S **C** Q and R **D** R and S

Q1

Fig. 1.1 shows a rocket-powered sled travelling along a straight track. The sled is used to test components before they are sent into space.

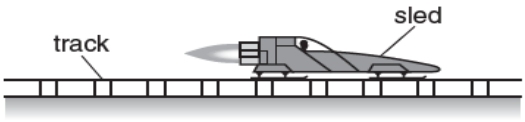


Fig. 1.1

Fig. 1.2 is the speed-time graph for the sled from time $t = 0$ s.

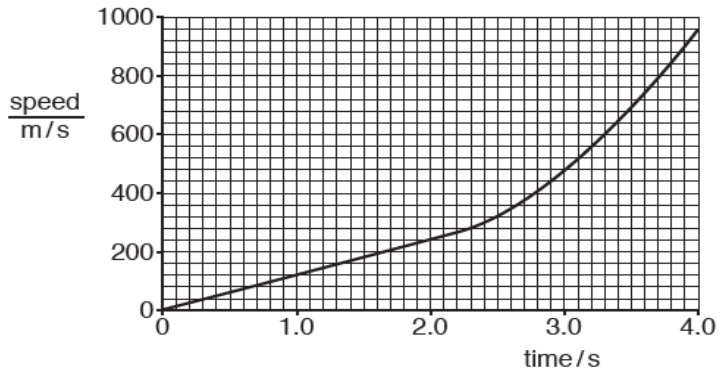


Fig. 1.2

(a) On Fig. 1.2, mark a point labelled P to indicate a time when the acceleration of the sled is not constant. [1]

(b) **(i)** Calculate the acceleration of the sled at $t = 1.0$ s.

acceleration = ...[2]

(ii) Determine the distance travelled by the sled between $t = 1.0$ s and $t = 2.0$ s.

distance = ...[2]

(c) The resultant force acting on the sled remains constant during the test.

Suggest why the acceleration of the sled is not constant.

.....

.....[1]

[Total: 6]

Q2

A plastic ball is dropped from the balcony of a tall building and falls towards the ground in a straight line.

Fig. 1.1 is the speed-time graph for the falling ball.

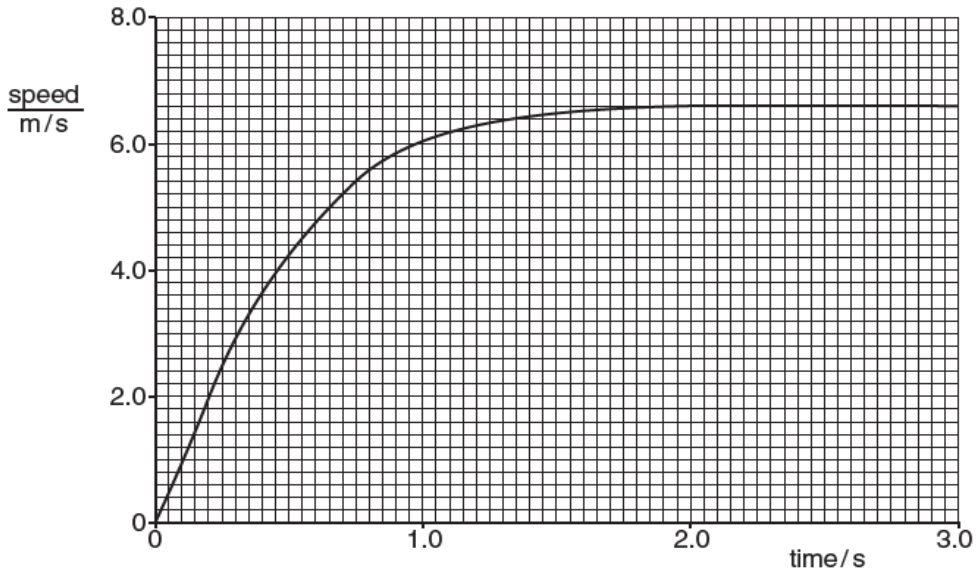


Fig. 1.1

(a) State and explain, in terms of forces, what is happening to the speed of the ball between time $t = 2.0\,s$ and $t = 3.0\,s$.

.....

.....

.....[2]

(b) On Fig. 1.1, mark a point P on the line where the acceleration of the ball is not constant. [1]

(c) Using Fig. 1.1,

(i) calculate the acceleration of the ball between $t = 0\,s$ and $t = 0.25\,s$,

acceleration = ...[2]

(ii) estimate the distance that the ball falls in the first 3.0 s.

distance = ...[2]

Q3

A comet, travelling in space, enters the atmosphere of a planet.

Fig. 1.1 is the speed-time graph for the comet from time $t = 0$ s.

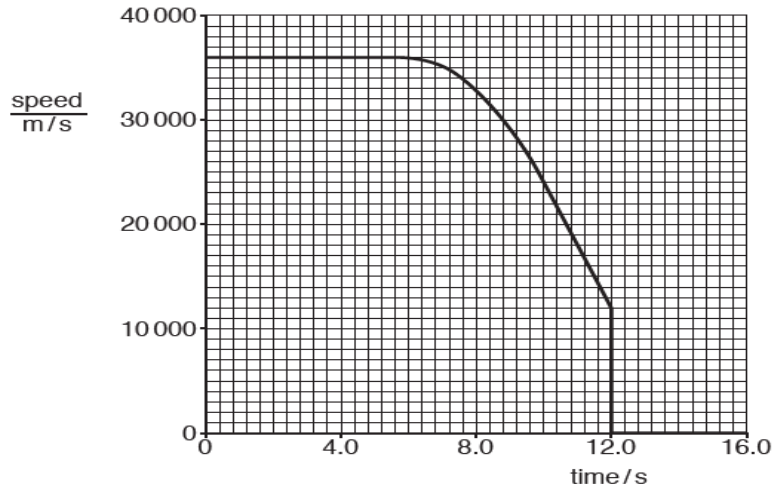


Fig. 1.1

(a) (i) During the period $t = 0$ s to $t = 6.0$ s, both the speed of the comet and the velocity of the comet remain constant.

State what this suggests about the motion of the comet.

.....

.....[1]

(ii) Determine the distance travelled during the period $t = 0$ s to $t = 6.0$ s.

distance = ...[2]

(b) Explain what the graph shows about the motion of the comet during the period $t = 6.0$ s to $t = 10.0$ s.

.....

.....

.....[2]

(c) Determine the acceleration of the comet at $t = 11.0$ s.

acceleration = ...[2]

(d) Suggest what happens to the comet at $t = 12.0$ s.

.....

.....[1]

[Total: 8]

Q4

An experiment is carried out to find the acceleration of free fall.

A strip of paper is attached to a heavy object. The object is dropped and falls to the ground, pulling the paper strip through a timer. The timer marks dots on the paper strip at intervals of 0.020 s.

Fig. 1.1 shows a section of the paper strip with the first three dots marked. The first dot on the paper strip, labelled A, is marked at the instant the object is dropped.

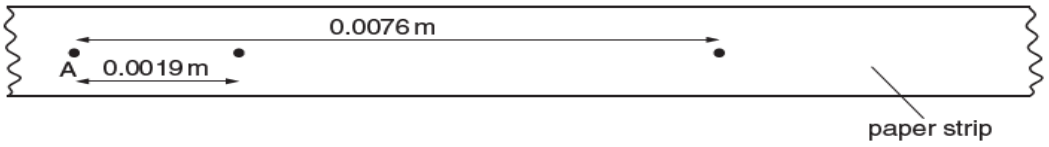


Fig. 1.1 (not to scale)

(a) State how the dots on the paper strip show that the object is accelerating.

.....

.....[1]

(b) Calculate the average speed of the object

(i) in the first 0.020 s after the object is dropped,

average speed = ...

(ii) in the second 0.020 s after the object is dropped.

average speed = ...
[3]

(c) Use the results from **(b)** to calculate the acceleration of the falling object.

acceleration = ...[3]

[Total: 7]

Q5

Define

Acceleration…a……

……..

Average speed ……

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(پرچہ نمبر1) تفہیم عبارت

سوال۔تفہیم عبارات جو کہ صفحہ نمبر41,43,47,49,51 پر درج ہیں آپ ان عبارات کو بغور پڑھنے کے بعد عبارات کے آخر میں دیے گئے سوالات کے جوابات خوشخط لکھیں۔

نوٹ۔ مندرجہ بالا سوالات کو حل کرنے کے لیے علیحدہ نوٹ بک کا استعمال کریں۔

حصہ مضامین

سوال۔ مضمون پابندی وقت تعلیم نسواں پڑھنے کے بعد دیے گئے سوالوں کے جوابات خوشخط لکھیں۔

نوٹ۔ مندرجہ بالا سوالات کو حل کرنے کے لیے علیحدہ نوٹ بک کا استعمال کریں۔

اُردو ورق شیٹ 2 | سینٹ انتھونی ہائی سکول | جماعت ہشتم سی

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پرچہ 1

سوال۔ مشق نمبر تین میں آپ نے لازمی ووٹنگ کا نظام، ایک اچھا طالب علم ، ٹیلی ویژن، اور اخبارات کی اہمیت پڑھا جو کہ آپ کی کتاب کے صفحہ،۔235،،۔233۔229 ,231 پر ہے آپ اس ان کے تعلق سے 100 الفاظ پر مشتمل ایک خلاصہ جات لکھیں۔

حصہ ای میل

سوال۔ آپ صفحات 262 تا 270 پر مشتمل پانچ ای میلز کو خوشخط لکھیں نیز اُن تمام قواعد وضوابط کو ملحوظ خاطر رکھتے ہوئے ای میل لکھنے کا آغاز کریں تا کہ آپ کو مواد اور طرز تحریر کے پورے پورے نمبر مل سکیں۔

اُردو ورق شیٹ3 سینٹ انتھونی ہائی سکول جماعت ہشتم سی

کوڈ3248 فیصل ٹاؤن لاہور June 2025

حصہ .Multiple Matching پرچہ1

سوال۔ بے ترتیب جملوں،لفظوں کا درست عبارت سے ملانا۔

آپ صفحہ نمبر66 تا 77 تمام عبارات کو بغور پڑھنے کے بعد اپنے جواب کے لیے

عبارت اے۔بی ۔سی ۔ڈی کو بغور پڑھنے کے بعد اپنے جواب کی نشاندہی کریں۔

حصہ نوٹس بنانا۔ نمونے کی مشقیں

سوال۔ صفحہ نمبر225 تا 215 ان تمام عنوانات کے نوٹس بنانے کی مشق کریں اور الگ

سے ہر عنوان کے تحت اپنی نوٹ بک میں نوٹس لکھیں۔

اُردو ورق شیٹ4 سینٹ انتھونی ہائی سکول جماعت ہشتم سی

کوڈ3248 فیصل ٹاؤن لاہور July 2025

پرچہ2

سوال۔ حصہ جملے سے جملہ بنانا

آپ صفحہ۳ تا ۲۰ تک کے تمام جملوں کو دی گئی ہدایات کی مدد سے بنائیں۔

جملہ بناتے وقت احتیاط کریں کہ جملے کا مفہوم نہ بدلے۔

حصہ خالی جگہ پُر کریں

سوال آپ صفحہ نمبر۳۶ تا ۵۰ کی عبارات کو غور سے پڑھنے کے بعد خالی جگہوں کو پر کریں۔

اُردو ورق شیٹ5 سینٹ انتھونی ہائی سکول جماعت ہشتم سی

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پرچہ 2 حصہ مضمون نگاری

آپ صفحہ نمبر ۹۹ تا ۱۱۵ کے عنوانات کا بغور جائزہ لینے کے بعد تمام مضامین کو دی گئی ہدایات کے پیش نظر خوشخط لکھیں۔

مضامین کے عنوانات

☆ ٹی وی پروگراموں میں بہتری لانے کی اشد ضرورت ہے۔

☆ گھروں میں پالتوں جانوروں کے رکھنے کے بڑے فائدے ہیں۔

☆ بے روزگاری سے معاشرتی برائیوں اور جرائم کو فروغ ملتا ہے۔

☆ نوجوان نسل موبائل فون کا استعمال صحیح نہیں کر رہی۔

☆ شجر کاری سے صحت افزا ماحول اور بے شمار فائدے حاصل ہوتے ہیں۔

☆ چڑیا گھر کو ختم کرنے کی بجائے بہتر بنانے کی ضرورت ہے۔

اُردو ورق شیٹ 6 | سینٹ انتھونی ہائی سکول | جماعت ہشتم سی

کوڈ 3248 | فیصل ٹاؤن لاہور | July 2025

پرچہ 2 حصہ اُردو میں ترجمہ

آپ صفحہ نمبر ۱۵۷ تا ۱۷۵ کے تمام انگریزی پیراگراف کا اُردو میں بامحاورہ ترجمہ کریں۔

نوٹ انگریزی سے اُردو ترجمہ کرنے کے لیے اسائنمٹ شیٹس کا استعمال کریں۔