



St. Mary's School, Dwarka
Holiday Homework
Class: IX
Worksheet 4

Subject: English

General Instructions:

- 1) The work should be done neatly and systematically.
- 2) The given questions are to be done in the English notebook.
- 3) Attempt all questions.

No. of questions: 10

M.M. 25

Q1. Read the passage given below and answer the questions that follow: (1 x 5 = 5)

Over the last few decades, single-use plastics have become a symbol of convenience—and of pollution. Plastic bags, straws, wrappers, and bottles often end up in oceans and landfills, taking hundreds of years to decompose. This not only harms marine life but also affects the food chain, as microplastics have been found in fish and even in human bodies. Many countries have begun banning or taxing single-use plastics to encourage more sustainable habits. Alternatives like cloth bags, bamboo straws, and compostable packaging are gaining popularity. However, the key to solving the plastic crisis lies not just in switching materials but in changing our mindset toward consumption and waste.

i. Which of the following best summarises the central idea of the passage?

- a) Plastic pollution is a problem that requires a change in mindset.
- b) Plastic bans have solved the issue of marine pollution.
- c) Alternatives to plastic are too expensive for common use.
- d) Plastic use should be encouraged in developing countries.

ii. The word “compostable” as used in the passage means:

- a) durable and reusable
- b) made from recycled plastic
- c) able to decompose naturally
- d) waterproof and strong

iii. Microplastics are a concern because they _____.

- a) clean the oceans naturally
- b) make plastic materials lighter
- c) provide nutrients to marine animals
- d) enter the food chain, impacting living beings

iv. The main reason countries are banning or taxing single-use plastics is to _____.

- a) reduce the cost of plastic production
- b) reduce environmental damage and promote sustainability
- c) encourage the export of cloth bags
- d) increase government revenue through plastic taxes

v. Suggest a suitable title for the passage.

- a) The History of Plastic Packaging
- b) Replacing Plastic with Metal and Wood
- c) Single-Use Plastics: A Crisis of Convenience
- d) How to Make Money from Plastic

Q2. You recently attended a school event where a famous environmentalist gave an inspiring talk on protecting nature. Write a diary entry in **100–120 words** describing what the speaker said, how the talk inspired you, and what actions you plan to take to help the environment.(3)

Q3. Attempt the questions given as directed.

($\frac{1}{2} \times 4 = 2$)

i. Choose the correct option to fill in the blank:

“Excuse me, _____ I speak to the manager for a moment?”

- a) would
- b) may
- c) shall
- d) need

ii. Identify the error in the sentence and supply the correction:

The furniture in the room were arranged neatly.

Error: _____ **Correction:** _____

iii. Fill in the blank with the correct form of the verb:

She would have passed the exam if she _____ harder.

- a) studies
- b) had studied
- c) studied
- d) was studying

iv. Choose the correct option:

She said to him, “Don’t touch that wire!”

- a) She warned him not to touch that wire.
- b) She told him don’t touch that wire.

- c) She told him to not touch that wire.
- d) She asked him not touching that wire.

Q4. Attempt the questions given as directed.

($\frac{1}{2} \times 4 = 2$)

i. Identify the correct option that denotes strong advice:

Children _____ respect their elders.

- a) would
- b) can
- c) must
- d) ought to

ii. Fill in the blank with the correct form of the word given in brackets:

The committee finally _____ on a decision after a long debate. (*agree*)

iii. Identify the error in the sentence and supply the correction:

Neither of the answers are correct in this case.

Error: _____ **Correction:** _____

iv. Choose the correct option:

You haven't finished your homework, _____?

- a) haven't you
- b) do you
- c) did you
- d) have you

Q5. Read the given extract to attempt the questions that follow:

($\frac{1}{2} \times 4 = 2$)

“When the humid shadows hover
Over all the starry spheres,
And the melancholy darkness
Gently weeps in rainy tears,
What a bliss to press the pillow
Of a cottage-chamber bed
And lie listening to the patter
Of the soft rain overhead!”

-Rain on the Roof

i. Which of the following best describes the mood created in these lines?

- a) joyful and energetic
- b) lonely and suspenseful
- c) calm and reflective
- d) cold and detached

ii. The phrase “melancholy darkness gently weeps” is an example of:

- a) simile
- b) personification
- c) metaphor
- d) hyperbole

iii. What does “humid shadows” most likely refer to?

- a) moonlight on the window
- b) distant clouds floating in the sky
- c) dark rain-bearing clouds
- d) figures hiding in the forest

iv. What feeling does the speaker associate with lying on the pillow and listening to rain?

- a) regret
- b) bliss
- c) boredom
- d) fear

Q6. Read the given extract to attempt the questions that follow:

($\frac{1}{2} \times 4 = 2$)

“On Sunday afternoons, Grandmother sent her down to the drawing-room to have a ‘nice talk with Father’. But the little girl always found mother reading and Father stretched out on the sofa, his handkerchief on his face, his feet on one of the best cushions, snoring.”

- The Little Girl

i. The scene in the drawing room reveals that the father is _____.

- a) warm and engaging
- b) indifferent and unapproachable
- c) playful and cheerful
- d) supportive and loving

ii. The phrase ‘nice talk with Father’ is best understood to be a/an _____.

- a) sincere effort to build emotional bonding between father and daughter
- b) nostalgic recollection of earlier family interactions
- c) ironic reference to a routine that is formal and emotionally distant
- d) a polite way of encouraging conflict resolution in the home

iii. What is ironic about the grandmother’s instruction to “have a nice talk”?

- a) The father is not in the mood to talk and is sleeping.
- b) The father is usually absent at that time.
- c) The child never wants to see her parents.
- d) They end up having deep and meaningful conversations.

iv. What larger theme is reflected in this passage?

- a) importance of discipline
- b) generation gap
- c) emotional distance in family
- d) need for hard work

Q7. Answer the following question in 40 to 50 words:

(2)

How does the poet's description of rain on the roof create a connection between nature and human emotions? Discuss the effect of this connection on the poet's state of mind.

Q8. Answer the following question in 40 to 50 words:

(2)

Bismillah Khan’s passion for his art was unmatched. How does the lesson highlight his prowess and deep connection to music?

Q9. Answer the following question in 100 to 120 words:

(3)

How does Toto’s behaviour reflect rebellion and curiosity? What does it suggest about keeping wild animals as pets?

Q10. Recreate one of **Toto**'s mischievous adventures using a **Digital Poster**, using tools like Adobe Express or Canva. Add dialogues or captions to bring his antics to life.

OR

Make a **Collage** (handmade) showcasing '**Unusual Pets around the World**'. Add fun facts or brief notes highlighting what makes them unique, just like Toto! (2)

Subject: Hindi

M.M- 25

प्रश्न 1 निम्नलिखित गद्यांश पर आधारित प्रश्नों के उत्तर निर्देश के अनुसार दीजिए:**(1×5 = 5)**

संघर्ष के मार्ग में अकेला ही चलना पड़ता है। कोई बाहरी शक्ति आपकी सहायता नहीं करती है। परिश्रम, दृढ़ इच्छा शक्ति व लगन आदि मानवीय गुण व्यक्ति को संघर्ष करने और जीवन में सफलता प्राप्त करने का मार्ग प्रशस्त करते हैं। दो महत्वपूर्ण तथ्य स्मरणीय है - प्रत्येक समस्या अपने साथ संघर्ष लेकर आती है। प्रत्येक संघर्ष के गर्भ में विजय निहित रहती है। एक अध्यापक ने निराशा होकर सफलता की उम्मीद को छोड़ने वाले अपने छात्रों को समझाते हुए संदेश दिया था- तुम्हें जीवन में सफल होने के लिए समस्याओं से संघर्ष करने का अभ्यास करना होगा। हम कोई भी कार्य करें, सर्वोच्च शिखर पर पहुँचने का संकल्प लेकर चलें। सफलता हमें कभी निराशा नहीं करेगी। समस्त ग्रंथों और महापुरुषों के अनुभवों को निष्कर्ष यह है कि संघर्ष से डरना अथवा उससे विमुख होना अहितकर है, मानव धर्म के प्रतिकूल है और अपने विकास को अनावश्यक रूप से बाधित करना है। आप जागिए, उठिए दृढ़-संकल्प और उत्साह एवं साहस के साथ संघर्ष रूपी विजय रथ पर चढ़िए और अपने जीवन के विकास की बाधाओं रूपी शत्रुओं पर विजय प्राप्त कीजिए।

(i) कौन से गुण मनुष्य के जीवन में सफलता प्राप्त करने का मार्ग प्रशस्त करते हैं ?

- (क) दया , साहस, परिश्रम
- (ख) परिश्रम, कठोरता , आत्मविश्वास
- (ग) साहस, दृढ़ इच्छाशक्ति, आलस्य
- (घ) परिश्रम, दृढ़ इच्छा शक्ति व लगन

(ii) प्रत्येक समस्या अपने साथ क्या लेकर आती है?

- (क) संघर्ष
- (ख) कठिनाइयाँ
- (ग) सफलता
- (घ) सुखद परिणाम

(iii) निम्नलिखित कथन (A) तथा कारण (R) को ध्यानपूर्वक पढ़कर उचित विकल्प का चयन कीजिए—
 कथन (A) तुम्हें जीवन में सफल होने के लिए समस्याओं से संघर्ष करने का अभ्यास करना होगा।
 कारण (R) प्रत्येक संघर्ष के गर्भ में विजय निहित रहती है।

- (क) कथन (A) तथा कारण (R) दोनों गलत हैं।
- (ख) कथन (A) गलत है तथा कारण (R) सही है।

(ग) कथन (A) सही है लेकिन कारण (R) गलत है।

(घ) कथन (A) तथा कारण (R) दोनों सही हैं। तथा कारण (R) कथन (A) की सही व्याख्या करता है।

(iv) समस्त ग्रंथों और महापुरुषों के अनुभवों का निष्कर्ष क्या है?

(v) उपर्युक्त गद्यांश के अनुसार जीवन में कैसे विजय होना चाहिए?

निम्नलिखित प्रश्नों के उत्तर दीजिए:

(1×5 = 5)

प्रश्न 2 शब्द और पद में क्या अंतर है ? किन्हीं दो अंतर को स्पष्ट कीजिए।

प्रश्न 3 अनुनासिक का उच्चारण किसकी सहायता से होता है? ? इसका एक उदाहरण दीजिए।

प्रश्न 4 आगमन और सुपात्र में उपसर्ग कैसे है ? स्पष्ट कीजिए।

प्रश्न 5 वनौषधि और भवन का सन्धि विच्छेद क्या होगा?

प्रश्न 6 'औषध+आलय' शब्द का सन्धि करते हुए लिखिए कि इसमें में कौन-सी संधि है?

प्रश्न 7 निम्नलिखित प्रश्नों के उत्तर दीजिए —

(1½×2=3)

(क) बुढ़िया और संभ्रांत महिला का दुख समान होते हुए भी भिन्न कैसे था?

(ख) लेखिका और तेनजिंग तथा उनकी बेटी के बीच के क्या संवाद हुआ था? किसी कार्य को सीखने के लिए आप क्या करते हैं?

प्रश्न 8 निम्नलिखित प्रश्नों के उत्तर दीजिए —

(1×2= 2)

(क) 'प्रभात की प्रथम किरण के स्पर्श के साथ ही वह किसी और जीवन में जागने के लिए सो गया' का आशय स्पष्ट कीजिए ?

(ख) गिल्लू को मुक्त करने की आवश्यकता क्यों समझी गई और उसके लिए लेखिका ने क्या उपाय किया ?

प्रश्न 9 निम्नांकित चित्र का 100 शब्दों में वर्णन कीजिए :

(5×1=5)



प्रश्न 10 अपने प्रिय पशु की आकृति बनाते हुए चाबी का छल्ला बनाइए।

(5×1=5)

Subject: Mathematics

No. of questions: 10

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- Q1. If $x = 7 + 4\sqrt{3}$, then find the value of $(x + 1/x)$. (2)
- Q2. Insert four irrational numbers between $3\sqrt{2}$ and $2\sqrt{3}$. (2)
- Q3. Express 0.35555..... in the form of p/q . (2)
- Q4. Give an example of a polynomial, which is:
 i) linear ii) cubic. (2)
- Q5. Two statements are given, one labelled as Assertion (A) and the other as Reason (R). Select the correct answer to these questions from the codes (a),(b),(c) and (d) as given below.
- a) Both A and R are true, and R is the correct explanation of A.
 b) Both A and R are true, and R is not the correct explanation of A.
 c) A is true, but R is false.
 d) A is false, but R is true.
- Assertion (A): The coefficient of the term having highest exponent in a polynomial is called its leading coefficient.
- Reason (R): The leading coefficient is the coefficient of the term with the smallest exponent in a polynomial. (2)
- Q6. If $p(x) = x^3 + 3x^2 - 2x + 4$, then find the value of $p(1) + p(-1)$? (3)
- Q7. Evaluate 73×127 using suitable identity. (3)
- Q8. Factorise $6\sqrt{3}x^2 - 47x + 5\sqrt{3}$ by splitting the middle term. (3)
- Q9. Locate $\sqrt{6.7}$ on number line. (3)
- Q10. Factorise $p(x) = 2x^3 - 3x^2 - 17x + 30$. (3)

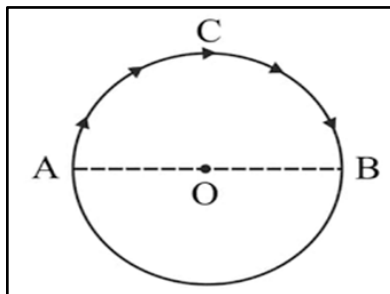
Activity: Use cardboard, paper plates, or any other craft material to create a model of a pizza. Divide the pizza into 8 equal slices and decorate it using colored paper or drawings to represent different rational fractions of toppings (e.g., $3/8$ with mushrooms, $1/4$ with olives, etc.).

Subject: Science

General Instructions:

- * Neatly write the answers in a separate thin notebook.
- * Attempt the questions keeping in mind the weightage of each question.

Q1. An insect moves along a circular path with a radius of 20 m at a constant speed. It takes 60 seconds to travel from point A to point B, which lies directly opposite on the path. Which of the following correctly represents an insect's speed? (1)



- (A) 0.67 m/s
- (B) 1.04 m/s
- (C) 2.09 m/s
- (D) 4.18 m/s

Q2. A sealed container is half-filled with water and the rest is air. If the container is heated, which of the following best describes the changes in the properties of the water and air inside the container? (1)

- A) The water will expand and take the shape of the container, while the air will remain unchanged.
- B) The water will vaporise into steam, increasing the pressure inside the container, while the air will expand.
- C). The water will remain in its liquid state, but its volume will decrease, while the air will become denser.
- D) The water will freeze into ice, and the air will contract and occupy less space.

Q3. **Assertion (A):** Ice floats on the surface of water.

Reason (R): The density of both water and ice is the same.

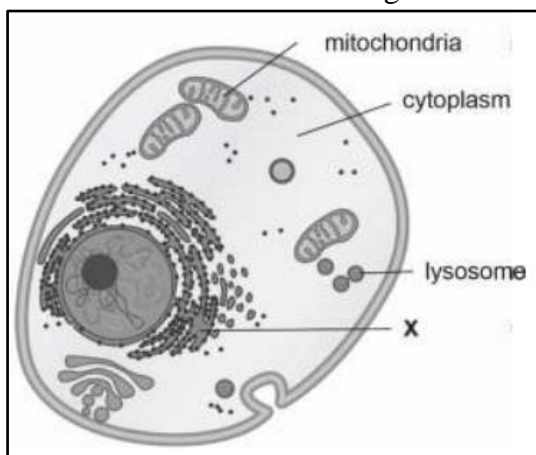
(1)

A statement of assertion (A) followed by a statement of reason (R) are given above. Choose the correct choice from:

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- Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
- Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- Assertion (A) is true but reason (R) is false.
- Assertion (A) is false but reason (R) is true.

Q4. The diagram shows an animal cell with some of its organelles. X is also a cell organelle.

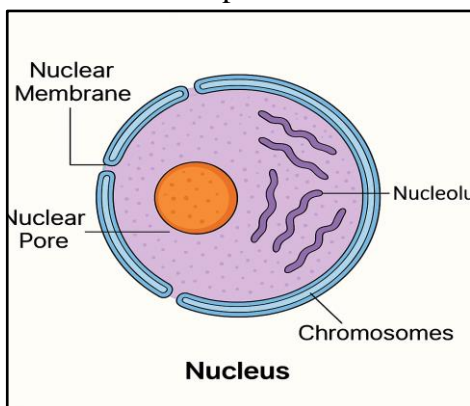


- Identify the organelle marked 'X'. What are the two types? (1)
- State one function of each type of this organelle. (1)

Q5. Determine the acceleration using the values provided in the table given below: (2)

	Initial Velocity (V_i) (m/s)	Final Velocity (V_f) (m/s)	Time (t) (s)	Acceleration m/s^2
1	10	55	15	
2	40	60	10	

Q6. A student observed a cell under a microscope and identified the nucleus.



Based on the observation, answer the following:

- The student noticed a dense, dark spot inside the nucleus. Identify this part and state its function. (1)
- The nuclear membrane separates the nucleus from the cytoplasm. Explain how this helps in cellular function. (1)
- How do chromosomes present in the nucleus help in the proper functioning of the cell? (1)

Q7. (a) How does atmospheric pressure influence the boiling point of liquids? Illustrate your answer with real-world applications.

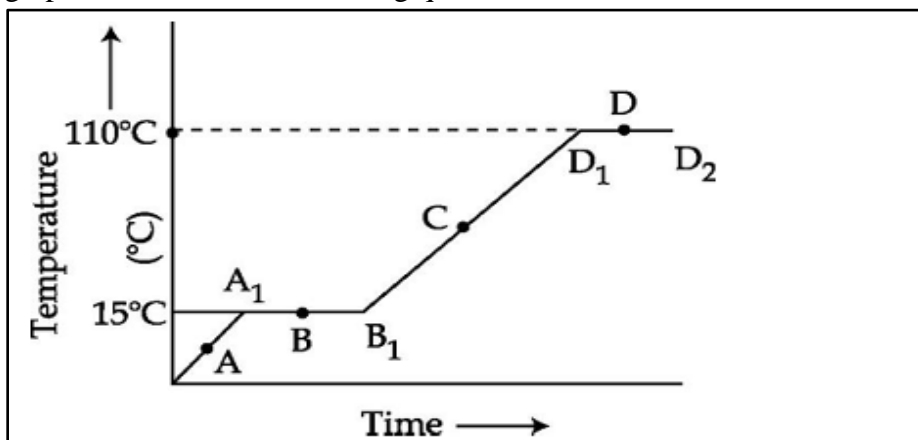
(b) Convert the following temperatures to Celsius scale:

- 196K
 - 265K
- (2+1)

Q8. A car is moving on a straight road at a constant velocity. The velocity-time graph for its motion is a straight line parallel to the time axis. (3)

- What does this indicate about the nature of the car's motion?
- Determine the acceleration of the car.
- If you were to plot a distance-time graph for this motion, what shape would it take?

Q9. The temperature-time graph given below shows the heating curve for pure wax. Observe the graph and answer the following questions: (1+1+2)



- What are the physical states of the substance at points A and C?
- Identify the portions on the graph that indicate a change of state:
 - from solid to liquid
 - from liquid to gas
- (A) From the graph, determine the melting point and boiling point of the substance. Explain how you identified these points.

OR

(iii) (B) How do changes in atmospheric pressure and the addition of impurities affect the boiling and melting points of a substance? Provide real-world examples to illustrate your answer.

Q10. **ACTIVITY** - Exploring Distance and Displacement (5)

Objective:

To understand the difference between distance and displacement by tracking their movement while walking in different paths.

Materials Required:

- Pedometer or step-tracking mobile app
- Measuring tape or GPS tool for displacement calculation

Steps to Follow:

Choose a Starting Point & Path:

- Select a starting location (e.g. home door, park).
- Walk in different patterns such as straight-line, circular, or random paths.

Track Your Movement:

- Use a pedometer or mobile app to record steps and total distance covered.
- If unavailable, estimate steps manually over a short-known distance.

Measure Total Distance Traveled:

- Record the total movement along the path, including all turns and backtracking.

Calculate Displacement:

- Find the shortest straight-line distance from start to endpoint using a measuring tape or GPS.
- Compare it with the total distance traveled to see the difference.

Compare and Visualize:

- Compare findings with different walking routes.
- Relate the concept to real-world scenarios like travel routes and navigation.

Record the observations in the table below:

Path Type	Total Distance Traveled (m)	Displacement (m)
Straight-line		
Zig-zag		
Circular		
Random		

Subject: Social Science

General Instructions:

- 1) The work should be done neatly and systematically.
- 2) The given questions will be in your respective subject notebooks.

- | | | |
|-----|--------------------------------------------------------------------------------------------------------------------|---|
| Q1. | Name the international body formed to coordinate socialist efforts. | 1 |
| Q2. | Why did Kerenskii's Government become unpopular in Russia? | 1 |
| Q3. | Why 82 degree 30'E has been selected as Standard Meridian of India? | 1 |
| Q4. | Assume that you have recently travelled in the Indian desert. Describe the desert to a person not living in India. | 2 |
| Q5. | What role does irrigation play in the farming practices of Palampur? | 3 |
| Q6. | What does the following cartoon signify? | 3 |



- | | | |
|-----|----------------------------------------------------------------------------|---|
| Q7. | 'Citizens play a major role in a democracy.' Discuss. | 3 |
| Q8. | What were the changes brought about by the Constitution of 1791 in France? | 3 |
| Q9. | Based on the picture, classify these activities into three sectors. | 3 |



- | | | |
|------|-----------------------------------------------------------------------------------------------------------|---|
| Q10. | Can you suggest some measures in the education system to mitigate the problem of the educated unemployed? | 5 |
|------|-----------------------------------------------------------------------------------------------------------|---|

Activity:

Activity: Write a letter from a modern-day student to a French revolutionary.

Ask about: Their struggles, hopes, and reactions to your modern world.

Creative Twist: Add sketches of modern items to surprise the revolutionary.

Subject: Artificial Intelligence

Using IDLE Python 3.7 to write the Python programs for the following:

1. To accept three numbers and print their sum.
2. To find the area of rectangle.
3. To convert the Celsius temperature to Fahrenheit.
4. To calculate the volume of cuboid.
5. To calculate the total surface area of cylinder
6. To calculate the simple interest.
7. To calculate the area of triangle.
8. To calculate the perimeter of triangle
9. To calculate the area of circle.
10. To print the Fibonacci series.

Note:

- **Write all the practical questions in MS-Word.**
- **Paste the snip of the program code and the output window.**
- **Upload the PDF of the practical file under the assignment created on Microsoft Teams.**

Subject: Music

No. of questions – 4

M.M. 15

Answer the following questions:-

Q.1) Differentiate between Murki and Meed. 2.5

Q.2) Write the notation of Teen Taal. 2.5

Q.3) Write the meaning of the following. 5

a) Aaroh

b) Avroha

c) Pakad

d) Vadi Swar

e) Time of singing

Q.4) Draw a labelled diagram of Tanpura. 5

Subject: Home Science

No. of questions: 10

M.M. 25

Q1. Which nutrient is most essential for the growth and repair of body tissues?

1

- a) Carbohydrates
- b) Proteins
- c) Fats
- d) Vitamins

Q2. Which of the following is a good source of omega-3 fatty acids?

1

- a) Olive oil
- b) Butter
- c) Salmon
- d) Cheese

Q3. Which condition is caused by a deficiency of vitamin C?

1

- a) Rickets
- b) Scurvy
- c) Pellagra
- d) Beriberi

Q4. Which vitamin is primarily obtained from sunlight exposure?

1

- a) Vitamin A
- b) Vitamin B12
- c) Vitamin C
- d) Vitamin D

Q5. Which vitamin is essential for proper vision?

1

- A) Vitamin A
- B) Vitamin C
- C) Vitamin D
- D) Vitamin K

Q6. What percentage of the human body is composed of water?

1

- A) 50-55%
- B) 60-65%
- C) 70-75%
- D) 80-85%

Q7. Very short answer type questions-

(5x1=5)

- I. What is the main function of carbohydrates in the body?
- II. What nutrient deficiency causes anaemia?
- III. What is the primary function of protein in the body?
- IV. What is the recommended daily intake of water for an average adult?
- V. Which vitamin is an antioxidant that helps protect cells from damage?

Q8. Short answer type questions-

(2x2= 4)

- I. How does food preservation contribute to maintaining food quality and safety?
- II. What is Malnutrition? Write any one way of how it can be prevented.

Activity:

Q9. Make a table enlisting the advantages and disadvantages of Frying, Boiling and Microwave on a A4 size sheet.

5

Q10. Determine which foods belong to which food groups. Create a chart on an A3 sheet by pasting food item pictures in the suitable food groups.

5

Cereals	Legumes & pulses	Nuts & Oilseeds	Fats & Oils	Fruits & Vegetables	Milk products	Eggs, poultry, fish, and meat	Spices