# St. Mary's School, Dwarka <br> Holiday Homework <br> Class IX <br> Week 3 <br> Worksheet 3 

## Subject: English

Q1. Read the following passage carefully.
As winter sets in, many birds leave their nests and fly back long distances to warmer places. There, it is easier for them to find enough food and breeding grounds. In spring they fly back to their homes. This amazing annual journey is called migration. Some mammals and fish also migrate. Most species of penguins swim to migrate.

Long ago people did not know where birds went in winter. Some believed that they flew up to some other planet. Others thought that they hid in the bottom of the wells.

The Arctic Tern is the greatest traveller of all. Each year it flies from the Arctic to the Antarctic and back again. This to and fro journey is almost 40,000 kilometres. Scientists have still not been able to find out how these birds travel so accurately every year. They probably use the Sun and the stars as guides, or may be the rivers and the mountains.

While the Arc Tern flies the longest distance, the Bar Headed Geese fly the greatest heights, close to eight kilometres. Huge flocks of geese fly over the Himalayas, the highest mountains in the world. They fly almost as high as a jet plane. Most of the other migratory birds fly below 100 metres.

The migratory birds that visit our country include the pelicans, the beautiful Brahminy Duck, the colourful Mallards, the Pintails and the Little Stints. Most of these guests migrate from Central Asia and Europe. Birds such as Spoonbills, Pied Cuckoos and Painted Stork migrate within our country.

The journey of the migratory birds is not very safe. There are many threats. In addition to bad weather and exhaustion, there is constant threat by human activities. Deforestation, effluents from factories and harmful gases are great obstacles in this great endeavour.

On the basis of your reading of the above passage, answer the questions given below:
(i)What do you understand by the term 'migration'?
a) a long and tiring journey
b) travelling away from home
c) travelling to warmer places during winter
d) journey undertaken for adventures and thrill
(ii) What did the people think about the migratory birds long ago?
a) travelled under the spell of a magician
b) were hunted down by hunters and predators
c) loved to change their nests to experience adventure
d) travelled to other planets or hid in the bottom of the wells
(iii) How do the migratory birds find their way?

1. by pheromones secreted by other birds
2. they have a very sharp eyesight
3. following the Sun and the stars
4. use rivers as mountains and guides
a) only 1
b) only 3
c) Both $1 \& 4$
d) Both 3\&4
(iv) According to the passage, which human activities disturb the migratory birds?
a) rapidly increasing plastic pollution
b) heaps of garbage littered here and there
c) cutting of trees and poisonous gases from industries
d) radiation from mobile towers
(v) Choose the word from the passage which mean the same as 'exhaustion'.
a) fatigue
b) depression
c) expression
d) laziness

Q2. You are Meher/Mohak Rajpal, the Headboy / Headgirl of Spring Dales School, Punjab. A 'Heritage Walk' has been organized for the students of classes VI to VIII to Humayun's Tomb by 'The Times of India'. The children need to carry their I-card, pencil, diary and the questionnaire provided by the Social Studies teacher. The students should make a note of every detail provided by the guide. Draft a notice informing the students about the same. Include the necessary details and put the notice in a box.

Q3. You are Anjum Chopra residing at 10/A Flat No. 301, Sector 11,Worli, Mumbai-29. Write a letter to the Municipal Commissioner of the area complaining about the inconvenience caused due to frequent power cuts for long hours since last two weeks.

Q4. Throughout history, the central role of women in the society has ensured stability, progress and longterm development of the nations. No country can progress if the women there are oppressed and unhappy. Design a poster along with an appropriate slogan to protect the rights of the girl child.

Q5. Read the given conversation and complete the passage that follows.

Interviewer: Why do you want to be a computer programmer?
Ravi: I have always been interested in computers.
Interviewer: Do you have any experience?
Ravi: No, but I'm a fast learner.
Interviewer: What kind of a computer do you use?

The interviewer asked Ravi(a) $\qquad$ . Ravi replied that (b) $\qquad$ .
At this the interviewer further asked Ravi (c) $\square$ . Ravi answered in negative(d) $\qquad$ . The interviewer asked Ravi (e) $\qquad$ .

Q6. Fill in the blanks by choosing the most appropriate word from the bracket.
a) I .........be thankful to you if you help me at this time of need. (will/should)
b) ...............you like to accompany us to the market tomorrow? (Would/Can)
c) The lady has grown so old that she $\qquad$ .not walk without a stick.(could not/cannot)
d) Had he worked hard, he $\qquad$ .have passed the examination.(must/could)

Q7. Fill in the blanks with the suitable form of the word given in the bracket:
Shalini (a) $\qquad$ (reach) Mrs. Rodrigues' pastry shop. She (b) $\qquad$ (stop) for a while at the entrance. She saw that Mrs. Rodrigues (c) $\qquad$ (arranged ) pastries and Mr. Rodrigues (d) $\qquad$ (count) the cash at the counter. Shalini (e) $\qquad$ (buy) fifty pastries from him.

## Q8. Fill in the blanks with the suitable words:

Chetan was tired (a) $\qquad$ hungry (b) $\qquad$ he continued to work (c) $\qquad$ he wasn't allowed to go home early. He was so tired (d) $\qquad$ he had been continuously working for eight hours. He kept working (e) $\qquad$ he was asked to stop by his employer. (f) $\qquad$ he worked very hard, his income was very little.

Q9. Discuss the theme of the poem 'The Road Not Taken'.
Q10. Solve the following puzzle based on the lesson 'The Fun They Had' using the clues given. You have to find the words from the lesson which mean the same as the given clues.
( $1 / 2 \times 5=2.5$ )

## ACROSS

4. casually
5. disagreement

## DOWN

1. arrogantly
2. hateful
3. displeased


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## Subject: Hindi

प्र 1 निम्नलिखित शब्दों में उचित स्थान पर अनुस्वार व अनुनासिक लगाइए ।
(क) कस
(ख) वदन
(ग) बास्रुरी
(घ) आख

प्र 2 निम्नलिखित शब्दों के विलोम शब्द लिखिए।
(क) आकाश (ख) निम्न
(ग) जीवन
(घ) साहस्त

प्र 3 निम्नलिखित शब्दों के पर्यायवाची शब्द लिखिए ।
(क) श्रेणी (ख) विद्यार्थी (ग) हर्ष (घ) शोक (ड़) बैचेनी (च) बेटा
प्र 4 कक्षा में हुई पाक कला गतिविधि की चर्चा को दो मित्रों के बीच संवाद के रूप में 80 से 100 शब्दों में लिखिए।

प्र 5 अपनी किसी रचनात्मक गतिविधि के विषय में बताते हुए अपने प्रिय मित्र को पत्र लिखिए। (5)
प्र 6 'यदि मै दिल्ली का मुख्यमंत्री होता / होती' विषय पर 80 से 100 शब्दों में एक सुंदर अनुच्छेद लिखिए।

प्र 7 स्वच्छता से संबंधित किन्हीं दो नारों का चित्र सहित वर्णन कीजिए।

## शोध एवं परियोजना कार्य

1 क्रि रहीमदास्स जी की जीवनी लिखकर उनके द्वारा रचित कोई हैसे पॉँच दोहे रचनात्मक ढंग से लिखिए जिनका वर्णन आपक्री पाठय पुस्तक्त 'स्पर्थ भाग 1 ' में न हों।

## Subject- Mathematics

Q1. Visualize 3.756 on the number line, using successive magnification
Q2. Represent $\sqrt{ } 3.5$ on the number line
Q3. Write three rational numbers between $5 / 7$ and $7 / 8$. 1
Q4. If $x=2+\sqrt{5}$, Prove that $x^{2}+1 / x^{2}=18$
Q5. Express $1.32+0.35$ as a fraction in simplest form. (166/99)
Q6. Rationalise the denominator $1 /(\sqrt{6}+\sqrt{ } 5-\sqrt{ } 11)$
Q7. If $a$ and $b$ are rational numbers, find $a$ and $b$

$$
(\sqrt{ } 2+\sqrt{3}) /(3 \sqrt{2}-2 \sqrt{ } 3)=a+b \sqrt{6}
$$

Q8. Define Rational number.
Q9. If $a=\sqrt{3}+\sqrt{2}$ and $b=\sqrt{3}-\sqrt{2}$, find the value of $a^{2}+b^{2}$
Q10. If $\mathrm{a}=9-4 \sqrt{ } 5$, find the value of $\mathrm{a}-1 / \mathrm{a}$
Q11. If $x=1-\sqrt{ } 2$, find the value of $x-1 / x$
Q12. Solve (a) $16^{3 / 4} \quad$ (b) $243^{2 / 5} \quad 2$
Q13. If $x=0.125$, find the value of $(1 / x) 1 / 3$
Q14. If $x=\sqrt{3}+\sqrt{2} /(\sqrt{3}-\sqrt{2})$ then find the value of $x^{2}$
Q15. If $x=1$, find the value of $x^{3}-2 x^{2}-7 x+5 \quad 3$
Q16. Find four rational numbers between $3 / 5$ and $4 / 5$
Q17. Find two irrational numbers lying between $\sqrt{ } 2$ and $\sqrt{ } 3$
Q18. Find two rational and irrational numbers between 0.3101 and 0.3222
Q19. Simplify the following:
a) $576^{-1 / 2}$
b) $343^{-1 / 3}$
c) $(-1 / 27)^{-2 / 3}$
d) $(0.008)^{4 / 3}$
e) $(729)^{-1 / 6}$
f) $(625 / 10000)^{-3 / 4}$

Q20. Simplify and express the result in the simplest form: $(25)^{3 / 2} \mathrm{x}(243)^{2 / 5}(1125 / 512) \mathrm{x}$

$$
(16)^{5 / 4} \times(8)^{4 / 3}
$$

PROJECT :
Q. Make designs on a plain sheet using square root spiral. For example


## Subject: Science

## Objective:

Ø Revision of concepts
$\emptyset$ Application of the concepts to real life situations.
$\emptyset$ Skills to carry out research work and develop scientific aptitude

## Instructions:

*Neatly write all the answers in your science notebook.
*Attempt the questions keeping in mind the weightage of each question.
*Assignment 'Summer Holiday Homework' will be created on TEAMS a PDF of handwritten work should be uploaded on it.

## Worksheet 3-Physics

## Let's Recapitulate!!!

1.Name the unit used to measure loudness. Write its symbol.
2. Define 1 hertz.
3.Name the organ in humans that produces sound.
4.Differentiate between music and noise with examples.
5.Naveen has put an electric bell in an airtight glass jar. The bell and jar are shown in the picture below. At first, Naveen could hear the bell ringing. But when his teacher pumped the air out of the jar, Naveen could not hear the bell.

a) Why was Naveen unable to hear the sound of the bell, when the air inside the jar was completely pumped out?
b) Explain why sound travels faster through water than air?
6. Study the diagrams of musical instruments given below. Classify the different types of instruments and name the vibrating parts of each.
a.

7. The diagram below shows the sound wave produced by a musical instrument.


A
B
C
(a) Identify the diagram representing:
i) the loudest sound
ii) the lowest pitch
iii) name the characteristic of sound which determines the loudness
8. List any 3 measures that can be adopted to curb noise pollution.
9. A Company operates a quarry near local housing. People living near this quarry-an open pit mine, complained about the high noise levels. The company then built an earth barrier to reduce the noise levels that reached the homes. This is shown in the diagram below.

(i) State what is meant by noise?
(ii) What was the source of noise in the given situation?
(iii) Explain how the barrier can reduce the noise levels?
(iv) List any two harmful effects of noise.
10. Human ear is a sense organ responsible for hearing and body balance. The outer ear receives the sound waves and transmits them down the ear canal to the eardrum. Based on your understanding of the structure of Human Ear answer the following questions.

i) Name the part of the outer ear which collects sound from the surroundings.
ii) Give the names of the three bones present in the middle ear.
iii) Name the part of the ear which vibrates when the sound from outside falls on it.
iv) Name the nerve which carries nerve impulse from the cochlea to the brain.
v) Mention the function of the 3 ear bones.

## Worksheet 3 -Chemistry

1. Arrange the following in increasing order of density: wood, honey, water and air.
2. Name the property of gases due to which it is possible to fill CNG in cylinders for using as fuel in cars.
3. Sponge is solid, yet we are able to compress it. Give reason.
4. Why do liquids have less density than solids?
5. Give reason:
(a) Solids are generally heavier than liquids.
(b) A table is solid at room temperature.
6. It is observed that bromine and air take about 15 mins to diffuse completely but bromine diffuses into a vacuum very rapidly. Why is it so?

7. There are two gases of air which dissolve in water by diffusion. Name the two gases. What is the biological importance of this process in nature?
8. There are many characteristics used to differentiate the three states of matter. Enlist any characteristics that are used to distinguish the states of matter.
9. The particles of matter are very small. Observe the diagram given below and write an activity to show that the particles of matter are tiny with the relevant steps.

10. Interparticle space is one of the characteristics of matte. Explain what would happen to the interparticle space if a liquid is heated?


## Worksheet -Biology

1. 'A cell is a building unit of an organism'. Justify the statement.
2. What will happen if an excess amount of fertiliser is added to the green grass lawn? Why? (2)
3. How will absence of any one of the cell organelles affect the cell's working?
4. Solution of $5 \%$ sugar and a solution of $10 \%$ sugar are kept in a trough separated by a semipermeable membrane. What will you observe after 1 hour? Give reason.
5. The cells of ants and elephants are the same in size. Do you agree with this statement? Explain.
6. What will happen if a fully turgid plant cell is placed in a hypertonic solution? Name the phenomenon.
7. Differentiate between cytoplasm and nucleoplasm.
8. Deepti soaked 5 grams of raisins in 25 mL of distilled water in a beaker as a part of her biology activity. After one hour what would be her observation? Identify the process involved. Define the process.

9. Different types of cells are present in the human body. Draw any four such cells and name them.
10. An egg after removing its shell by putting it in dilute hydrochloric acid solution is placed in two different solutions. What will happen when the egg is placed in? (i) pure water (ii) concentrated solution. Give reason for your answer.

## Subject: Social Science

## Worksheet 3 -Political Science

No. of questions: 10
M.M. 20

Q1. Identify the person in the picture.

a) Shri Arvind Kejriwal
b) Shri Narender Modi
c) Shri Ram Nath Kovind
d) Shri Anil Bajpai

Q2. The oath of office to the post of Lt. Governor is administered by $\qquad$ .
a) The President of India
b) The Chief Justice of the concerned state High Court
c) The Chief Justice of the Supreme Court
d) The Prime Minister

Q3. He holds the office for a term of $\qquad$ years.
a) 10 Years
b) 6 Years
c) 5 Years
d) 4 Years

Q4. What is the Chinese term to denote Chinese Parliament 'National People's Congress'?
Q5. 'The country's leaders cannot sign any treaty with another country without taking permission from its neighbouring country.' Is it Democratic?
Q6. 'A person is not allowed to deliver a speech in public.' Identify the Fundamental Right violated.
Q7. This cartoon was drawn when elections were held in Iraq with the presence of US and other foreign powers. What do you think this cartoon is saying? Why is 'democracy' written the way it is?


Q8. 'Everyone is not given the right to vote in the Indian elections.' List three cases where the right to vote can be denied to the Indian citizens.
Q9. What could happen if:
a) there was no written constitution
b) Fundamental Rights are violated

Q10.

i) Which of the following is NOT an eligibility criterion to become a member of Lok Sabha?
a) Candidate should not hold office of profit
b) Candidate should be mentally sound
c) Candidate must be from Arts field
d) Candidate age should be 25 years or over
ii) In order to be recognized as an official opposition group in the parliament, how many seats should it have?
a) $1 / 3^{\text {rd }}$ of the total strength
b) $1 / 4^{\text {th }}$ of the total strength
c) $1 / 6^{\text {th }}$ of the total strength
d) $1 / 10^{\text {th }}$ of the total strength
iii) The members of Rajya Sabha work for $\qquad$ .
a) The President
b) The People
c) The States
d) The Prime Minister
iv) How many members can the President nominate in the Rajya Sabha and Lok Sabha?
a) 6,3
b) 8,2
c) 10,3
d) 12,2
v) What is the tenure of the elected members of Rajya Sabha?
a) 2 Years
b) 4 Years
c) 6 Years
d) 8 Years

## Worksheet 3 - History

No. of questions: 10
M.M. 20

Q1. Finally, a group of several hundred people marched towards the $\qquad$ part of the city and stormed the fortress-prison, the Bastille, where they hoped to find hoarded ammunition?
A. Eastern
B. Northern
C. Western
D. Southern

Q2. Who said " The task of representing the people has to be given to the rich"?
A. Mirabeau
B. Jean Paul Marat
C. Rousseau
D. Georges Denton

Q3. Which of the following decisions was taken by the convention?
A. It declared France a constitutional Monarchy
B. Abolished the Monarchy
C. All men and women above 21 got the right to vote
D. Declared France a Republic

Q4. How does a subsistence crisis happen?
A. Bad harvest leads of scarcity of grains
B. Food prices rise and the poor cannot buy bread
C. Leads to disease and death

## D. All of the above

Q5. What did the newly declared National Assembly swear? 1
Q6. What did the nobles do when the peasants attacked Chateaux? 1
Q7. How did a directory rule in France? Explain. 3
Q8. What were the causes of the empty treasury of France under Louis XVI? 3
Q9. Write the importance of Napoleon Bonaparte in the History of France and the world. 3
Q10. Which laws were introduced by revolutionary government to improve the condition of women in France?

## Worksheet 3-Economics

No. of questions: 10
M.M. 20

Q1. How do farm labourers get wages in Palampur? 1
Q2. Which is the most labour absorbing sector of the economy? 1
Q3. What is multiple cropping? 1
Q4. Land being a natural resource, is necessary to be carefully used. Why? 2
Q5. What can be done to increase the non-farm activities in the Indian Villages? 2
Q6. Describe three features of small-scale manufacturing as non-farming activity in Palampur. 2
Q7. What is the aim of production? State any four requirements for production. 2
Q8. What is land? Suggest any two ways to sustain land. 2
Q9. Explain three merits and three demerits of Green Revolution.
Q10. Is it true that foodgrains output in India has increased significantly because of larger area under cultivation? Explain.

## Worksheet 3- Geography

No. of questions: 10
M.M. 20

Q1. The Standard Meridian of India $82^{\circ} 30^{\prime}$ E passes through which of the following places?
(a) Kanyakumari in Tamil Nadu
(b) Walong in Arunachal Pradesh
(c) Mirzapur in Uttar Pradesh
(d) Kachchh in Gujarat

Q2. If you intend to visit Kavarati during your summer vacations, which one of the following Union Territories of India you will be going to?
(a) Puducherry
(b) Lakshadweep
(c) Andaman and Nicobar
(d) Diu and Daman

Q3. The wet and swampy belt of the Northern Region is known locally as:
(a) Terai
(b) Bhabar
(c) Doab
(d) Bhangar

Q4. Geology is a branch of Geography that deals with
(a) Formation of clouds in the sky.
(b) Study of the Solar system.
(c) Phenomena of causing day and night.
(d) Finding rocks in the interiors of the Earth.

Q5. Who devised the lines of latitude and longitude? 1
Q6. Which country is known as the land of the 'midnight Sun'? 1
Q7. Mention six major tectonic plates. 3
Q8. Why is Peninsular Plateau of India known as structure of minerals? Explain. 3
Q9. https://youtu.be/YXAjyfD_Wyg
Copy the above link and watch the video based on the Coastal Plains of India and answer the following questions that follows:
(a) Eastern Coastal Plains are wider than the Western Coastal Plains. Give reason 1
(b) How does coastal plains play a very important role in the economic development of India? 2

Q10. Locate and label the following items on the given map: 5
1 The state which shares its boundaries with China, Nepal and Bhutan.
2 The state which shares its boundaries with both China and Pakistan.
3 The state having common land and sea boundary with Pakistan.
4 An Indian state that shares its boundary with Bangladesh and Myanmar.
5 Smallest among the States sharing border with Pakistan.


## Subject: Information Technology

## Chapter: Digital Documentation

No. of questions: 10
M.M. 25

1. Which option should be used to type $\mathrm{H}_{2} \mathrm{O}$ ?
a) Superscript
b) Subscript
c) Bold
d) Underline
2. The shortcut key used to insert a table is $\qquad$
a) $\mathrm{ctrl}+\mathrm{F} 12$
b) Alt+Delete
c) Ctrl+Delete
d) Tab+Delete
3. While drawing the table, what is the shape of the mouse pointer?
a) Pencil
b) Black Pointing Arrow
c) White Pointing Arrow
d) Black Plus
4. Do both Superscript and Subscript appear larger than the same character? (True/False)
5. In $\qquad$ page orientation the height of the page is less than its width..
a) Landscape
b) Portrait
c) Book
d) None
6. Mention any three uses of Libre Office Writer.
7. Recognize and explain the functions of the Navigator window marked in the figure given below: What are the two ways to open the Navigator window?

8. Explain any four features of Word Processor. $2+2=4$
9. Differentiate between the following:-
a. Save a Document and Open a Document
b. Center Alignment and Justify Alignment
10. List any three ways of creating a blank document in Libre Office Writer. Write the shortcut keys for the following tools:-
a) Superscript
b) Spelling and Grammar
c) Find and Replace
d) Redo
