# St. Mary's School, Dwarka <br> Holiday Homework <br> Class IX <br> Week 2 <br> Worksheet 2 

## Subject: English

## Q1. Read the following passage.

One of the most intriguing stories of the Russian Revolution concerns the identity of Anastasia, the youngest daughter of Czar Nicholas II. During his reign over Russia, the Czar had planned to revoke many of the harsh laws established by previous czars. Some workers and peasants, however, clamoured for more rapid social reform. In 1918 a group of these people, known as Bolsheviks, overthrew the government. On July 17 , they murdered the Czar and what was thought to be his entire family.

Although witnesses vouched that all the members of the Czar's family had been executed, there were rumours suggesting that Anastasia had survived. Over the years, a number of women claimed to be Grand Duchess Anastasia. Perhaps the best -known claimant was Anastasia Tschaikovsky, who was also known as Anna Anderson.

In 1920, eighteen months after the Czar's execution, this terrified young woman was rescued from drowning in a Berlin river. She spent two years in a hospital, where she attempted to reclaim her health and shattered mind. The doctors and nurses thought that she resembled Anastasia and questioned her about her background. She disclaimed any connection with the Czar's family.

Eight years later, though, she claimed that she was Anastasia. She said that she had been rescued by two Russian soldiers after the Czar and the rest of her family had been killed. Two brothers named Tschaikovsky had carried her into Romania. She had married one of the brothers, who had taken her to Berlin and left her there, penniless and without a vocation. Unable to invoke the aid of her mother's family in Germany, she had tried to drown herself.

During the next few years, scores of the Czar's relatives, ex-servants, and acquaintances interviewed her. Many of these people said that her looks and mannerisms were evocative of the Anastasia that they had known. Her grandmother and other relatives denied that she was the real Anastasia. However, tired of being accused of fraud, Anastasia immigrated to the United States in 1928 and took the name Anna Anderson. She still wished to prove that she was Anastasia, though, and returned to Germany in 1933 to bring suit against her mother's family. There she declaimed to the court, asserting that she was indeed Anastasia and deserved her inheritance.

In 1957, the court decided that it could neither confirm nor deny Anastasia's identity. Although, we will probably never know whether this woman was the Grand Duchess Anastasia, her search to establish her identity has been the subject of numerous books, plays and movies.
On the basis of your reading of the above passage, answer the questions that follow: ( $1 / 2 \times 5=\mathbf{2} .5$ )
(i)The Czar was murdered because
a) he was cruel
b) he was trying to revoke harsh laws
c) some people wanted more rapid reforms
d) he was not an efficient leader

## ii) After the execution on the Czar's entire family Anastasia was rescued from

$\qquad$
a) a jungle in the neighbouring country
b) a concentration camp
c) a slum in Germany
d) drowning in the Berlin river
(iii) Many people thought that Anna Anderson was Anastasia because
a) she resembled the members of her family
b) her story about the killing seemed to be true
c) her looks and mannerism were the same as the Czar's daughter
d) she knew many secrets of the royal family
(iv) The witnesses $\qquad$ that all members of the Czar's family had been executed.
a) gave assurance
b) thought
c) hoped
d) convinced some
(v) In court she__maintaining that she was Anastasia and deserved her inheritance.
a) finally appeared
b) spoke forcefully
c) testified
d) gave evidence

Q2. You are Anivesh/Anurita Yadav, the Sports Captain of St. Joseph's School, Dehradun. Your school is organizing a workshop on the topic 'The Value of Yoga and Meditation' by an internationally renowned Yoga instructor for the students of classes VI-VIII. Draft a notice for the same including the necessary details. Also inform the students that they can come up with their queries only after the workshop is over. Put the notice in a box.

Q3. It is impossible to imagine a day without a newspaper. It is one of the greatest, cheapest and oldest means of communication between people and the world. Write an article about the 'Importance of Newspaper' in 100 to 120 words. Also provide a suitable heading to your article.

Q4. All the religions promote peace, love and feeling of brotherhood among fellow beings. Communal harmony is the need of the hour. Design an attractive poster along with a message to sensitize people towards the issue.

Q5. Fill in the blanks with suitable words.
My sister is celebrating (a) $\qquad$ her birthday (b) $\qquad$ marriage anniversary tomorrow. I am not sure (c) $\qquad$ I will be going(d) $\qquad$ not as I have my accounts paper the next day. Last year also I could not go (e) $\qquad$ I was down with typhoid. My mother stayed back to give me company. (f) $\qquad$ I insisted that she should, she chose not to go. While I was preparing for exams everyone in the family was having fun.

Q6. Fill in the blanks with the correct form of the words given in the brackets:
(i)Mary and Jane are twin sisters. Their mother (a) $\qquad$ (die) when they (b) $\qquad$ (be) born. They were separated after that. Mary (c) $\qquad$ (go) to live in France and Jane to England. They (d) $\qquad$ (be) sixteen years old now and they (e) $\qquad$ (not see) each other since they were three years old.

Q7. Choose the correct option to fill in the blanks.
(i) Glassware should be handled $\qquad$
a) gracefully
b) anxiously
c) cautiously
d) patiently
(ii) The mother $\qquad$ waited for her daughter's call.
a) carefully
b) sorrowfully
c) excitedly
d) anxiously
(iii). It is $\qquad$ hot today.
a) much
b) more
c) very
d) quiet
(iv). She dance. $\qquad$ .at the musical.
a) smartly
b) gracefully
c) fastly
d) melodiously

## Q8. Read the following conversation and complete the paragraph given below:- $\quad(1 / 2 \times 4=2)$

Customer: Please show me a good cap.
Shopkeeper: What kind of cap do you need?
Customer: One that covers the face
Shopkeeper: It won't be cap then, it would be a mask.

The customer requested the shopkeeper(i) $\qquad$ . The shopkeeper asked customer (ii)
$\qquad$ . The customer told the shopkeeper(iii) $\qquad$ At this the
shopkeeper said (iv) $\qquad$ .

Q9. Read the extract given below and answers the questions that follow.
'Today, Tommy found a real book.'
a) Why was the thought of a real book weird to the speaker?
b) How was the real book different from the book that they had used?

Q10. Solve this interesting puzzle based on the lesson 'The Fun They Had' using the clues given.


## ACROSS

3. A small store room on the roof.
4. Mechanical teacher
5. The children from old school assembled here.

## DOWN

1. Margie wrote about all important incidents in it.
2. A special language used by Margie to submit her homework.
3. The books that Tommy and Margie read in their school.

## Subject: Hindi

M. M-25

प्र 1 'दुख का अधिकार' कहानी समाज में फैले अंधविश्वारों और ऊँच - नीच के भेदभाव को प्रदर्शित करती है। स्पष्ट कीजिए।

प्र 2 वर्तमान सामाजिक परिस्थितियों को बेहतर बनाने के लिए आप समाज में किस प्रकार आशा की किरण फैलाएँगे ?
(2)

प्र 3 कवि रैदास्स ने अपने प्रथम पद में भक्त और भगवान की तुलना किस- किससे की है? आप भक्ति करते समय ईश्वर से क्या प्रार्थना करते है?

प्र 4 लेखक भगवाना की माँ की सहायता चाहते हुए मी क्यों नहीं कर सका?
प्र 5 क्या केवल पोशाक से ही व्यक्ति के सही व्यक्तित्व की पहचान की जा सकती है ? तर्क सहित अपने मत की पुष्टि कीजिए।

प्र 6 कवि रैदास अपने ईश्वर के विषय में क्या कहना चाहते है ?
प्र 7 लेखक यशपाल की भाषा शैली कैसी है ? कोई तीन विशेषताएँ लिखिए।
प्र 8 निम्नलिखित शब्दों का वर्ण - विच्छेद कीजिए ।
(क) प्रार्थना
(ख) व्यक्तित्व
(ग) पुष्टि
(घ) प्रदर्शित
(ड़) अंधेरा
(च) प्रज्ञा

प्र 9 निम्नलिखित शब्दों में उचित स्थान पर अनुस्वार लगाइए ।
(क) जन्माध
(ख) तात्रिक
(ग) अभियता
(घ) प्रश्सा
(ड़) पजाब
(च) मच

प्र 10 निम्नलिखित शब्दों में उचित स्थान पर अनुनासिक लगाइए
(क) तैयारिया
(ख) जाबाज़
(ग) कल्पनाए
(घ) टाग
(ड़) विधिया
(च) लाघना

## Subject- Mathematics

Q1. Simplify: $(\sqrt{ } 3+\sqrt{ } 7)(\sqrt{ } 3-\sqrt{ } 7)$.
Q2. Rationalise the denominator of $1 /[7+3 \sqrt{ } 3]$.
Q3. Represent $\sqrt{ }(9.3)$ on the number line.
Q4. Simplify:
(i) $7^{2 / 3} \cdot 7^{1 / 5}$
(ii) $10^{1 / 2} / 10^{1 / 4}$

Q5. What is the value of $(256)^{0.16} \mathrm{X}(256)^{0.09}$ ?
Q6. State if zero is a rational number. Justify your statement by representing it in $\mathrm{p} / \mathrm{q}$ where q is not equal to 0 and $p$ and $q$ are both integers.
Q7. Find out 5 different rational numbers between $12 / 11$ and $10 / 11$.
Q8. Simplify: $[\{(82+92) 2\} 0] 2$
Q9. Let a > 0 be a real number and p and q be rational numbers. Then which of the following statement(s) is/are correct?
(i) ap $\cdot a q=a p+q$
(ii) $\mathrm{ap} \mathrm{bp}=(\mathrm{ab}) \mathrm{p}$
(iii) $(\mathrm{ap}) \mathrm{q}=\mathrm{apq}$
(iv) All of these

Q10. If $x=3+2 \sqrt{ } 2$, find the value of $x^{2}+1 / x^{2}$
Q11. Express the following numbers in the form of $\mathrm{p} / \mathrm{q}$
(a) -25.6875
(b) 0.621621621 ..
(c) 15.712121212. .

Q12. Write one rational \& one fractional number between $0.515115111 \ldots$ and $0.535335333 \ldots$.
Q13. Write one example each of two irrational numbers whose:
(a) Sum is a rational number
(b) Product is an irrational number
(c) Difference is an irrational number
(d) Quotient is a rational number

Q14. (a) Find the value of $x$ if $2^{x-7} x 5^{x-4}=1250$
(b) Find the value of $x$ and $y$ if:

$$
\begin{equation*}
3^{x-1}=9 \& 4^{y+2}=64 \tag{3}
\end{equation*}
$$

Q15. Find the value of $a \& b$ if $5+2 \sqrt{3}=a+b \sqrt{ } 3 / 7+4 \sqrt{3}$
Q16. If $x=3+\sqrt{ } 8$, then find the value of $x^{2}+1 / x^{2}$.
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. Give an example of two irrational numbers whose: (A) Sum is rational
(B) product is rational (C) quotient is rational.

## Q20. CASE STUDY

Leela went to a small garment store with her son. She wanted to buy an outfit for him. In the garment store, she found two types of shirts: Formal and Denim. There were 3 choices for formals and 4 choices for denims. There were two types of pants: Jeans and Formal, with 2 choices for each of them.
(1x2=2)
Question 11) If any shirt can be worn with any pair of pants, the number of ways Leela can select an outfit for her son are
a) 20
b) 24
c) 26
d) 28

Question 12) Leela decides to select either a formal shirt with a pair of formal pants (not with jeans) or a denim shirt with a pair of jeans (not with formal pants). The total number of ways she can select the outfit now are :
a) 12
b) 14
c) 16
d) 20

## Subject: Science

## Objective:

Ø Revision of concepts
Ø 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 2 -Physics

1.The sound wave produced by a vibrating tuning fork is shown in the figure. Which part of the wave represents half the wavelength?

2. Use the stopwatch in your phone and count the pulse for one minute. Calculate its frequency.
3. The image shows the hearing ranges of various animals-


Study the given image and infer which of the animals can hear i) infrasound ii) ultrasound
4. What change can be observed in the wavelength of a note, when the pitch of a harmonium is lowered? Will it decrease/increase/remain the same/first decrease and then increase?
5. The velocities of sound in four different media $P, Q, R$ and $S$ are $23112 \mathrm{~km} / \mathrm{h}, 16920 \mathrm{~km} / \mathrm{h}, 968 \mathrm{~km} / \mathrm{h}$, and $5511 \mathrm{~km} / \mathrm{h}$ respectively. Which of the medium could be a liquid substance? Give reason for your answer.
6. Distinguish between loudness and intensity of sound.
7. How does the sound produced by a musical instrument, reach your ears? Astronauts need radio transmitter to talk to each other on moon. Why?
8. Download the app 'frequency generator' from play store.

Listen to different frequencies of sound in the app and fill the table to check the sensitivity of your ears.

| S. No. | Frequency | Audible/ Inaudible |
| :---: | :--- | :--- |
| 1 | 5 Hz |  |
| 2 | 10 Hz |  |
| 3 | 20 Hz |  |
| 4 | 30 Hz |  |

Repeat the same with family members of different age groups. Does the sensitivity of ears change with age?
9.(a) Name four ways in which sound can be produced.
(b) Calculate the speed of a sound wave whose frequency is 2 kHz and wavelength 65 cm .
10.The given figure shows the snap shot of a sound wave in a certain medium at a certain instant.

a) What is the amplitude of the sound wave?
b) If the velocity of the wave is $4 \mathrm{~m} / \mathrm{s}$, calculate the wavelength of the wave if its frequency is 20 Hz .
c) If a wave of the same type but with higher frequency is passed through a given medium, will the speed of the wave increase, decrease or remain the same?

## Worksheet 2 -Chemistry

Max. Marks- 25

1. Solids do not need a container to hold them. Give reason.
2. Why is alcohol considered as a liquid and not a solid or a gas?
3. Classify the following as matter or non-matter:

Sugar cubes, bitter, hot, sand
4. What is the difference between a gas and a vapour?
5. On entering the house Tanu asked if her mother had coffee with a lady visitor. Her mother replied in the affirmative. How did Tanu make her deductions?
6. How will you prove the presence of diffused air in fresh water?
7. Explain the term diffusion with the help of a short activity (with diagram).
8. In which of the following conditions the distance between the molecules of hydrogen gas would increase? Also give reason for your answer.
(i) Increasing pressure on hydrogen contained in a closed container.
(ii) Some hydrogen gas leaking out of the container.
(iii) Increasing the volume of the container of hydrogen gas.
(iv) Adding more hydrogen gas to the container without increasing the volume of the container.
(a) (i) and (iii)
(b) (i) and (iv)
(c) (ii) and (iii)
(d) (ii) and (iv)
9. Why is the transportation of Compressed Natural Gas(CNG) easier than that of coal and petroleum? Define the property of gases that facilitate this process.
10. Complete the following table-

| Basis of comparison | Solids | Liquids | Gases |
| :--- | :--- | :--- | :--- |
| Rigidity/Fluidity |  |  |  |
| Filling a container |  |  |  |
| Shape and volume |  |  |  |
| Inter-particle force of <br> attraction |  |  |  |
| Kinetic energy |  |  |  |

## Worksheet 2 - Biology

1. What is a gene?
2. Write any two points of difference between a plant cell and an animal cell.
3. Why does the skin of your finger shrink when you wash clothes for a long time?
4. What will happen when a red blood cell is kept in concentrated saline solution? Why?
5. How is the cell wall of a plant cell different from its cell membrane?
6. Draw a neat diagram of a eukaryotic nucleus and label the following parts:
a. Nuclear membrane
b. Nucleoplasm
c. Chromatin reticulum
7. Analyse the significance of nuclear membrane in a cell.
8. State cell theory.
9. Differentiate between a bacterial cell and an onion peel cell.
10. What are the main functional region of a cell? Explain with the help of a diagram.

## Subject: Social Science

## Worksheet 2 -Political Science

Q1. In a democracy, the final decision-making power is in the hands of those who are $\qquad$ .
a) nominated by the government
b) elected by the people
c) authorised by the President
d) authorised by the Prime Minister

Q2. A system in which only those who are in power and their supporters are benefited, and excludes minorities and weaker sections.
a) Dictatorship
b) Monarchy
c) Democracy
d) Socialism

Q3. Which one of the following is NOT followed in a democratic form of government?
a) Equality and justice for the citizens
b) Assurance of political rights to the citizens
c) Restriction on freedom of speech and expression.
d) Consultation in decision making

Q4. What do you think is the most common form of democracy in modern world?

Q5. 'Democracy faces many challenges. List any two major challenges faced by democracy
in India.

Q6. Who led a military coup in Pakistan in 1999? 1
Q7. 'Citizens play a major role in a democracy.' Discuss.
Q8. How do you think democracy improves the quality of decision making?
Q9. What does this cartoon signify? Find out any two countries where this could apply and why?


Q10. Differentiate between democratic and non-democratic country. What values does a citizen expect from a democratic rule?

## Worksheet 2 -History

Q1. Which one important law that came into effect soon after the storming of the Bastille in 1789.
Q2. What did the French Revolution of 1789 stand for?
Q3. What do you understand by Guillotine?
Q4. Why were images and symbols used in the eighteenth-century France?
Q5. What was Jacobins club?
Q6. Write a brief introduction on following picture.


Q7. Describe the incidents that led to the storming of the Bastille. 3
Q8. Write a short note on the document 'Declaration of the Rights of Man and citizen.' 3
Q9.How was the Church responsible for the French Revolution?
3
Q10. Did women have a revolution in 1789 and after it?

## Worksheet 2 -Economics

Q1. What is the main economic activity in Palampur? 1
Q2. What was the status of upper caste families in Palampur? 1
Q3. What was the benefit of electricity in Palampur? 1
Q4. Highlight the basic constraints in raising production from a farm. 2
Q5. Explain the term physical capital. Mention its different types with examples. 2
Q6. Give three reasons why small farmers have to arrange capital by borrowing.
Q7. State the importance of growing more than one crop on a piece of land.
Q8. What is Multiple cropping? How does it help in farmer's prosperity?
Q9. 'Modern farming methods require more inputs which are manufactured in industry.' Do you agree?
Q10. What do you mean by Green Revolution? Why was it caused?

## Worksheet 2 -Geography

Q1. What are tectonic plates? 1
Q2. Read the information in the table below and answer the question:
This type of soil is typical of the Deccan trap (Basalt) region spread over northwest Deccan plateau and is made up of lava flows.

They're well-known for their capacity to hold moisture. In addition, they are rich in soil nutrients, such as calcium carbonate, magnesium, potash and Lime.
They're made up of extremely fine i.e. clayey material
Identify the kind of soil whose features have been mentioned.
Q3. Express $1^{\circ}$ angular distance in kilometres.
Q4. Why are the Himalayas called the young fold mountains?
Q5. Name the oldest landmass of India.Which types of rocks are found there? 1
Q6. What was the Gondwanaland?
Q7. The sun rises two hours earlier in Arunachal Pradesh as compared to Gujarat in the west but the watches show the same time. How does this happen?
Q8. Distinguish between Bhangar and Khadar 3
Q9. How is that the opposite seasons are found in Australia and India?
Q10. With reference to the International Date Line, state the following:
(a) It is meaning and application.
(b) The important deviations it makes and reasons for the same.
(c) Give an example of how time lost or gained is computed with reference to this line.

## Subject: Information Technology

## Chapter -Digital Documentation

1. A $\qquad$ is a computer application used for the production of printable material.
a) word processor
b) spreadsheet
c) presentation
d) database
2. The shortcut key to jump to the end of a document is $\qquad$ .
a) ctrl+Home
b) ctrl+End
c) PgUp
d) PgDn
3. The Header and Footer is available in $\qquad$ menu.
a) Edit
b) Format
c) Insert
d) View
4. The Spellings are corrected automatically in Writer because of the $\qquad$ feature.
a) AutoCorrect
b) AutoText
c) AutoSize
d) AutoComplete
5. The default orientation of a page in Writer is $\qquad$ .
a) Landscape
b) Portrait
c) Book
d) None
6. Which features of Writer helps you to keep your document error free?
7. Explain the following change case options with the help of an example.
a) Toggle Case
b) Capitalize Each Word
c) Sentence Case
d) Upper Case
8. a) Shagun's Science teacher has asked her to write a paragraph on Vermi Composting. After $1 * 4=4$ completing the paragraph the teacher wants her to find all the keywords matching the word 'soil' and replace them by the keyword 'manure'. Which feature of Writer will she use to do so?
b) The computer teacher was explaining the heading tag in HTML. She wrote the word 'Welcome to HTML' six times to demonstrate the use of heading tag. Which feature of Writer did she use to type the same text six times.
c) Rahul was asked to write the important international days to be celebrated in the month of June. He wrote $21^{\text {st }}$ June is celebrated as International Day of Yoga. Which feature did he use to raise the characters 'st' in the date mentioned above?
d) Amrit created a document on the topic 'Artificial Intelligence'. The page was divided into more than two columns to make it look like a newspaper column. How could he do so?
9. a) Differentiate between copying a text and moving a text.
b) List any four-word processing applications.

## 10. PRACTICAL WORK:

Perform the following practicals on OpenOffice Writer and mention the steps with screenshots in a MS- Word document.

Objective: To create, edit and apply the various features of table.

1) Create a time table for class IX as shown below:

| Class Teacher: Ms. Meera Saish |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Days | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ |
| Mon | Hindi | Math | Math | Eng | SSC | SUPW | SUPW | SUPW |
| Tues | Science | Science | SSC | Eng | Math | Hindi | Hindi | SSC |
| Wed | SSC | Math | Science | Eng | Sc.(Pr.) | Sc.(Pr.) | Sc.(Pr.) | Games |
| Thurs | IT | IT | Math | Eng | Sc. | S.Sc. | SSC | Games |
| Fri | Math | Math | Science | Eng | SSC | Hindi | Math | CTP |

Using the merge cell option redesign the table as shown below:-

| Class Teacher: Ms. Meera Saish |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Days | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ |
| Mon | Hindi | Math Math |  | Eng | SSC | SUPW SUPW | SUPW |  |
| Tues | Science Science |  | SSC | Eng | Math | Hindi Hindi | SSC |  |
| Wed | SSC | Math | Science | Eng | Sc.(Pr.) | Sc.(Pr.) | Sc.(Pr.) | Games |
| Thurs | IT IT |  | Math | Eng | Sc. | SSC | SSC | Games |
| Fri | Math Math |  | Science | Eng | SSC | Hindi | Math | CTP |

Take the screenshots stepwise while creating the time table and merging the cells of the table.

