

# QUEENS' COLLEGE, INDORE

# SUMMER ASSIGNMENT

# WING-MIDDLE

# CLASS – IX

#### Queens' College, Indore SESSION 2021-22 Summer Assignment Class –IX (NEW)

#### **SUBJECT : ENGLISH**

**Summer Vacation Homework** 

#### A) Writing Skills (05 marks)

Write a self composed poem on the given topic - minimum 04 stanzas

I) My school My pride

ii) I am blessed

iii) Nature 🌿 🍃

[Expressions - 02]

[Content-02]

[ Vocab - 01]

#### OR

b). Write an article using one of the following prompts

1. The morning view from your terrace.

2. The last vacation photo in your parent's phone.

#### OR

c). Draw a short comic strip telling about a funny incident in lockdown.

#### B) Dictionary Task (05 marks)

Read English newspaper, watch your favorite TV showshow. Take note of the new words( At least 05 Daily) write those words in a notebook , find meaning and frame sentences.

#### C) Reading Skills (05 marks)

I.Read minimum two Books(Novel / Fiction etc) and write book review , also make a video.

II. Read the chapters "Sound of music" and "The little girl" and write the character sketches of the following

I) Bismillah Khan

II) Evelyn

III) Kezia

#### **SUBJECT : HINDI**

परियोजना कार्य (प्रोजेक्ट वर्क)

निम्नलिखित प्रश्नों के आधार पर परियोजना तैयार कीजिए |

1. दुःख का अधिकार पाठ के आधार पर लेखक और बुढ़िया में अपनी कल्पना के आधार पर संवाद लिखिए |(लगभग 20संवाद )| चित्र बनाकर अपने कार्य को आकर्षक बनाइए|

अथवा

अपने घर में किसी वरिष्ठ व्यक्ति के साक्षात्कार का वीडियो बनाइए, जिसमें work from home या ऑनलाइन शिक्षा पर चर्चा हो|

2. रैदास के पदों में जिन संतों /कवियों का परिचय दिया गया है | उनके चित्रों के साथ संक्षेप में उनके परिचय पर आधारित Power Point प्रस्तृति तैयार कीजिए |(जैसे-नामदेव ,सधना ,सैन् ,त्रिलोचन, कबीर )

3. <u>https://gandhiashramsabarmati.org/en/visitor-information/ashram-virtual-tour.html</u> कुछ दिन तो गुजारिए गुजरात में !

उपरोक्त लिंक की सहायता से अहमदाबाद में बापू के आश्रम की virtual visit अर्थात आभासी यात्रा कीजिए |साथ ही निम्नलिखित आंदोलनों के बारे में Power Point प्रस्तुति तैयार कीजिए |

क) नमक सत्याग्रह आन्दोलन

- ख) भारत छोड़ो आन्दोलन
- ग) असहयोग आन्दोलन

परियोजना कार्य का मूल्यांकन निम्न बिन्दुओं के आधार पर होगा |

- विषय वस्तु
- भाषा एवं प्रस्तुति
- शोध एवं मौलिंकता

विशेष - परियोजना कार्य ,आकर्षक और सृजनात्मक होना चाहिए |

#### SUBJECT - SCIENCE - ( PHYSICS )

Design a working model based on any phenomena of physics or based on any laws of physics. And then prepare a project file (of at least 15 pages )describing the model and your efforts .

- 1. Newton's laws of motion
- 2. Law of conservation of linear momentum
- 3. Collision
- 4. Law of conservation of angular momentum
- 5. Law of conservation of linear momentum
- 6. Surface tension
- 7. Sound energy
- 8. Any electrical device
- 9. Pascal's law
- **10. Electric motor**
- 11. Electric generator
- 12. Electromagnetic induction
- 13. Polaroid sheet activities
- 14. Total internal reflection
- 15. Refraction
- 16. Optical instrument
- 17. Drones
- **18.** Robotics
- 19. Alarms
- 20. Density experiments
- 21. Interference or diffraction experiments
- 22. Hydraulics
- 23. Household circuits
- 24. Charge experiments

These are just examples. You all are free to decide your model. And then based on this model you need to prepare a file.

Things to be included in file

- 1. Front page
- 2. Certificate
- 3. acknowledgement
- 4. Index
- 5. Aim
- 6. Principle
- 7. Theory
- 8. Procedure

- 9. diagram/image
- 10. outcome/result
- 11. Conclusion
- 12. bibliography

It has to be completed by 30th of june.

Also compulsorily watch the following videos Motion | 9th Physics | Khan Academy - YouTube

https://www.youtube.com/playlist?list=PL2ub1\_oKCn7oWeAKoLZV-hWT4tthqdHtg

And then based on above videos, write short note of at least 1 page in your own language on following topics

- 1. Distance and displacement
- 2. Speed
- 3. Velocity
- 4. Acceleration
- 5. Uniform velocity
- 6. Three equation of motion
- 7. Graphical derivation of equation of motion
- 8. Circular motion

Last date 5th june 2021.to be uploaded on g-suit.

#### SUBJECT - SCIENCE ( Chemistry)

Work sheet - Containing MCQS, fill in the blanks and true and false. <u>https://drive.google.com/file/d/1mFCpRRkmIiXLukPiNoArL4-knAfx6Iy0/view?usp=drivesdk</u>

Assignment1: Perform an experiment to demonstrate that evaporation causes cooling.

Assignment 2: Prepare a model to demonstrate movement of particles in solids liquids & gases.

Assignment 3: With the help of activity show that air contains water vapours.

Assignment 4: With the help of labeled diagram describe an activity to show that particles of matter are very small.

Assignment 5: Demonstrate an activity to show that evaporation causes cooling.

Assignment 6: Answer the following:

Q1. For determining accurate boiling point of water can we use tap water?

Q2. What precautions should we take care while performing experiment to find melting point of ice?

Q3. Fill in the blanks:

(a) S.I. unit for pressure....

(b) Translatory motion is present in ..... states of matter.

(c) Attractive forces are .... in solids.

Q4. What are S.I. unit of density?

Q5. Which out of chlorine, sodium chloride and honey has largest interparticle attraction?

Q6. Give one word answer to each of the following:

(a) Name given to outward force experienced by walls of the container due to collisions of gas particles.

(b) Type of particle movement in solids.

(c) The property of matter that can be guessed from zig-zag movement of dust particles

Q7. Which out of honey and water has stronger attractive forces?

Q8. What name is given to matter state which contains neutral gaseous mixture of positive ions and electrons.

Q9. In which state of matter the particles have highest kinetic energy?

Q10. Why is density of solid more than that of liquid?

Q11. Give example of a substance whose density in liquid state is higher than that in solid state.

Q12. How is fluidity of a liquid different from viscosity?

Q13. Name three states of matter. Compare the following in three states of matter

- (i) Interparticle space
- (ii) Interparticle forces
- (iii) Particle motion.

Q14. Suggest experimental activity to demonstrate the particle nature of matter.

Q15. Account for the following:

- (a) Particle motion increases with the rise in temperature.
- (b) Solids do not exhibit diffusion whereas gases do.
- Q16. Give two reasons to justify:
- (a) Water at room temperature is liquid.
- (b) An iron almirah is solid at room temperature.

#### **Assignment 7: Complete the following**

- Q.1. Which one of the following sets of phenomena would increase on raising the temperature ?
  - (a) Diffusion, evaporation, compression of gases
  - (b) Evaporation, compression of gases, solubility
  - (c) Evaporation, diffusion, expansion of gases
  - (d) Evaporation, solubility, diffusion, compression of gases.
- Q.2. Seema visited a Natural Gas Compressing Unit and found that the gas can be liquefied under specific conditions of temperature and pressure. While sharing her experience with friends, she got confused. Help her to identify the correct set of conditions
  - (a) Low temperature, low pressure
  - (b) High temperature, low pressure
  - (c) Low temperature, high pressure
  - (d) High temperature, high pressure.
- Q.3. The property to flow is unique to fluids. Which one of the following statements is correct ?
  - (a) Only gases behave like fluids
  - (b) Gases and solids behave like fluids
  - (c) Gases and liquids behave like fluids
  - (d) Only liquids are fluids.
- Q.4. During summer, water kept in an earthen pot becomes cool because of the phenomenon of
  (a) diffusion
  (b) transpiration
  (c) osmosis
  (d) evaporation.
- Q.5. A few substances are arranged in the increasing order of forces of attraction between their particles. Which one of the following represents a correct arrangement ?
  - (a) Water, air, wind
  - (b) Air, sugar, oil
  - (c) Oxygen, water, sugar
  - (d) Salt, juice, air
- Q.6. On converting 25°C, 38°C and 66°C to kelvin scale, the correct sequence of temperature will be
  - (a) 298 K, 311 K and 339 K
  - (b) 298 K, 300 K and 338 K

- (c) 273 K, 278 K and 543 K
- (d) 298 K, 310 K and 338 K.
- Q.7. Choose the correct statement from the following :
  - (a) conversion of solid into vapours without passing through the liquid state is called vaporisation.
  - (b) conversion of vapours into solid without passing through the liquid state is called sublimation.
  - (c) conversion of vapours into solid without passing through the liquid state is called freezing.
  - (d) conversion of solid into liquid is called liquefication.
- Q.8. The boiling points of diethyl ether, acetone and *n*-butyl alcohol are 35°C, 56°C and 118°C respectively. Which one of the following correctly represents their boiling points in kelvin scale ?
  - (a) 306 K, 329 K, 391 K
  - (b) 308 K, 329 K, 392 K
  - (c) 308 K, 329 K, 391 K
    (d) 329 K, 392 K, 308 K.
- Q.9. Which condition out of the following will increase the evaporation of water ?
  - (a) Increase in temperature of water
  - (b) Decrease in temperature of water
  - (c) Less exposed surface area of water
  - (d) Adding common salt to water.
- Q.10. Under which of the following conditions, the distance between the molecules of hydrogen gas would increase ?
  - (*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).

#### SUBJECT - SCIENCE (Biology)

CHAPTER-1 Fundamental Unit of Life -

I. WORKSHEET

1.MCQ, 2. True/ False, 3. Fill in the blanks , 4. Reasoning Assertion , 5. Match the Column & 6. Paragraph based questions.

LINK to find worksheet--

https://drive.google.com/file/d/1EZVVCAvAMasyFvhYcPN92eSBWLGDXPSE/view?usp=sharing

II. biology lab manual activities- Write practicals in lab manual-

**1.Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells & to record observations and draw their labeled diagrams.** 

2. Identification of Parenchyma, collenchyma and Sclerenchyma tissues in plants, striped, smooth and cardiac muscle fibers and nerve cells in animals, from prepared slides. Draw their labeled diagrams.

**3.Study of the characteristics of Spirogyra, Agaricus, Moss, Fern, Pinus (either with male or female cone) and an Angiospermic plant. Draw and give two identifying features of the groups they belong to.** 

4. Observe the given pictures/charts/models of earthworm, cockroach, bony fish and bird. For each organism, draw their picture and record a) one specific feature of its phylum. b) one adaptive feature with reference to its habitat.

5.Study of the external features of root, stem, leaf and flower of monocot and dicot plants.

<u>http://www.olabs.edu.in/?pg=topMenu&id=53</u> visit the website and learn about above practicals then write them in file.

III.Art integration activities based on Cell- fundamental unit of life-

- 1. Make a model of any type of cell, OR
- 2. Make a puzzle of any type of cell using cardboard.

Rubrics:(5 marks)

Timely submission : 1 mark

Creativity in art integration : 1 marks

Use of materials either biodegradable or best out of waste: 1 mark

Various cell organelles labeled : 2 marks

By doing this activity you will be able to understand more about cell and it's organelles and able to learn about functions of cell oragnelles.

Fun activity - virtual visit to zoo- will help you to understand better about variety of organisms which part of Ch- diversity in living organisms. Link is given below-

A day at Mysore zoo

https://youtu.be/MuB7HHeuNbc

SOCIAL SCIENCE

#### PROJECT WORK 05 Marks

1. Every student has to compulsorily undertake one project on Disaster Management.

2 Objectives: The main objectives of the project work on Disaster Management to the students are to a create awareness in them about different disasters, their consequences and management and prepare them in advance to face such situations.

- ensure their participation in disaster mitigation plans
- enable them to create awareness and preparedness among the community.
- The project work should also help in enhancing the Life Skills of the students
- If possible, different forms of art may be integrated in the project work.

Students may choose any one of the following topics for their presentation:

1 Covid - 19 Pandemic

- 2. Chamoli Cloudburst/Tehri(Uttarakhand) Cloudburst.
  - 3. Earthquakes in Madhya Pradesh.
    - Suggested presentations.

i) Create a handbook giving information about Institutions and Organisations and local adminstration working for disaster management.

ii)Work done by NGOs for disaster management.

iii)Create a PPT on work done by - National Disaster Management Authority OR National Disaster Response Force.

iv) Create a Calender related to your topic covering important dates and events.

v) Create a PPT for Awareness regarding the dangers of the disaster with important do's and don'ts.

vi) Create a pictorial flowchart to show the impact of a disaster on nature and ecology.

• Rubrics for assessment:

S.no	Aspects	Marks
a	Content accuracy, originality and analysis	2
b	Presentation and creativity	2
c	Timely submission	1

- A Summary Report should be prepared highlighting:
- Objectives realized through individual work and group interactions;
- Calendar of activities;
- Innovative ideas generated in the process.
- The record of the project work (internal assessment) should be kept for a period of three months for verification, if any.
- Date of submission: June, 15. 2021

SUBJECT -Information Technology					
Q1. Make a PPT on Communication Skill and Self Management Skill. Q2. Make Mind Map on Communication Skill and Self Management Skill . Rubrics : Content and knowledge, Creativity and Submission on time (2+2+1 Marks)					
Solve the worksheet on ICT Skills (Copy Work)					
Q1. Multiple choice Questions:					
1. The basic operations performed by a computer are					
a) Arithmetic operation	b) Logical operation				
c) Storage and relative	d) All the above				
2. The brain of any computer system is					
a) ALU b) Memory c) CPU	d) Control unit				
3. The two kinds of primary memory are:	.,				
a) Primary and secondary b) Random and sequential c) ROM and RAM d) All of above					
4. Which of the following is an e-mail service?					
(a) WhatsApp (b) WeChat (c) Gmail	(d) Facebook				
5 Which of the following is not an input device?					
a) OCB					
c) Voice recognition device	COM (Computer Output to Microfilm)				
6. An optical input device that interprets pencil marks on p	aper media is				
a) O.M.R b) Punch card reader c) Optical scanners	d) Magnetic Tape				
7) What does GPS stand for?					
(a) Global Positioning System (b) Global P	avment System				
(c) Clobal Program System (d) Clobal P	ainting System				
(c) Giobar i rogram System					
8) What do you type in the "To" field?					
(a) The topic of the e-mail (b) The topic of	he main message of the e-mail				
(c) Email address of the person to whom you want to send a copy of the e-mail					
(d) Email address of the person you are sending the mail to					
9) What is the term used when you press and hold the left mouse bay and move the mouse around?					
(a) Highlighting (b) Dragging (c) Selecting	(d) Moving				
10) Web site's front page /main page is called					
a) Browser Page b) Search Page c) Home Page d) Bookmark					
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**Q2..** Define the following :

## a) Computer b) Data c) Programs d) Network e) Internet f) file g) folder

h) Web browser i) Web page j) website

Q3. Answer the following questions

- a) Write different uses of computers.
- b) List and explain nay five input and output devices.
- c) Draw the block diagram of computer and explain its working.
- d) Explain primary and secondary memory.
- e) Explain different types of primary memory.
- f) What is operating system . Name any five operating system.
- g) Draw the diagram of desktop of windows.
- h) Write advantages and disadvantages of internet.
- i) What are search Engine . Name any five search engines.

Q4. Make a PPT on :

- a) Various types of input and output devices.
- b) Prepare a presentation on the components of Windows 7 desktop.
- c) Different social networking sites.

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# Queens' College, Indore (2021-22)

### **Summer Fun Activities Class IX: Mathematics**

## "The only way to learn mathematics is to do mathematics"

Greetings!!!!

Dear students let's turn this summer break time into math fun time by doing some interesting knowledgeable fun activities.....

If anyone have any difficulty in any activities contact with your respective teachers via WhatsApp or direct call daily between 4:00 to 5:00 pm



Are you amazed with the answers, isn't its really interesting? You can make number of jokes using math words or fact, so let's try to **make 5 math related jokes** and show your creativity with math.

(Prepare a PDF for the above fun activates and upload it into GCR)

## **Rubrics**:

Timely submission :2 marks Content: 3 marks

# <u> # Fun activity 2</u>

# **SUDOKU**

## "A Sudoku per day keep the Math phobia away "

Do you know Students a research says **Sudoku** is one game, like crossword puzzles and riddles, that increase neuroplasticity and **make your smarter**. With increased neuroplasticity, **you** are better able to view something from multiple angles and anticipate and understand new patterns.

So make yourself smarter and intelligence by solving a sudoku per day.

Worried about sudoku boxes???

Just click here to download sudoku gift boxes.

You can download and solve it in the word format file only using Red color and upload it on GCR on or before 25/may/2021.

MILESTO

## **Rubrics**:

Timely submission with accuracy :5 marks



Dear Students it's time to check your subject knowledge

by giving a short online test

Click here to cross Milestone1

# **#Fun Activity 3**

# Math and Art

Do you know! many of the core skills in art and math are closely related. Both disciplines require spatial reasoning skills and the ability to recognize patterns. Artists *and* mathematicians use geometry in their work — including shapes, symmetry, proportion, and measurement.

For this reason, among others, many educators have changed their focus from **STEM (science, technology, engineering, and math)** to *STEAM*- adding an "A" for Art.

Just look at beautiful example below of art using math which we had learnt in unit 1 number system under topic: **representation of an Irrational number on the number line by spiral method** 



So dear students use your concepts with skills and share your creativity with friends and teachers using above sample ideas by uploading it on GCR on or before 25/may/2021

### **Rubrics**:

Timely submission: 2 marks Creativity and presentation: 3 marks

# <u>#Fun activity 4</u>

# <u>Math Paradox</u>

A **mathematical paradox** is a **mathematical** conclusion so unexpected that it is difficult to accept even though every step in the reasoning is valid.

### Don't understand so much???

Don't worry just look at the example given below?

### I method

### II method

$S = 1 - 1 + 1 - 1 + 1 - 1 + 1 - 1 + \cdots$	$S = 1 - 1 + 1 - 1 + 1 - 1 + 1 - 1 + \cdots$
$= (1-1) + (1-1) + (1-1) + (1-1) + \cdots$	$= 1 - (1 - 1) - (1 - 1) - (1 - 1) - \cdots$
$= 0 + 0 + 0 + 0 + \cdots$	$= 1 - 0 - 0 - 0 - \cdots$
= 0	= 1

Therefore, since S = 1 and S = 0, it would follow that 1 = 0. What's wrong with this argument?

### Isn't interesting???

So just explore yourself and find 2 more interesting paradox using different resources and make a PDF file with proper explanation and submit it into GCR on or before 25/may/20201

### **Rubrics**:

Content accuracy, originality: 3 marks Timely submission: 2 marks



# <u>#Fun activity 5</u>

# <u>Golden Ratio</u>

It's time to explore mathematics in your body Dear students let's find out some ratio in your body like

1. The length of the face over the width of the face.



### (Human computer "Shakuntala Devi)

2. The total width of the front teeth in the upper jaw over their height



3. The distance between the tip of the jaw to the top of the head over the distance between the nose to the top of the head.



(Great mathematician Srinivasa Ramanujan)

What ratio will you get?? Is it 1.618?

Just enhanced your knowledge by knowing more about Golden ratio in our body by <u>click here</u>

Gain your knowledge about Golden ratio in this vacation and we will discuss about the same in our classes also.

Also add some more stone to your crown by exploring:

- 1. Fibonacci number
- 2. Palindromic number

# **#Fun activity 6**

Let's move on to recall some important concepts or lectures that we had attend during online class from last few days by solving below worksheet into math notebook with sincerity and honesty which includes IMP questions for upcoming exams as well as also for Olympiads and Detailed assessment.

Submit your answers on or before 25/may/21

Rubrics:

Timely submission :3 marks Content accuracy, originality: 2 marks <u>Click here to download worksheet</u>



Dear Students it's time to check our subject

knowledge by giving a short online test

Click here to cross Milestone3



# **#Fun activity 7**

## Math lab Activity

Dear students last but not the least its time to do some math activities in math lab not book which helps us to understand math more accurately and preciously with proofs.

Given below are the list of activities write it in your lab manual and prepare a short video explaining any of the two activities with proper steps and colored chart paper or else you can make some animated PPT also and upload it into GCR on or before 25/May/21

Click here to find math lab manual activities

### <u>Note: Write down activity no. 1,10,11,12, ,15,16,17,18,20,23,24,25</u> only from the above given link

Now students you can do above activities virtually with your own and understand more clearly by animated video and with complete procedure.

### Rubrics for lab manual activities:

Timely submission: 1 mark Creativity in presentation work: 2 marks Justification (procedure and conclusion): 2 marks

### Click to enter math lab virtually

