**PRAGATI PUBLIC SCHOOL, DWARKA**

**HOLIDAY HOME WORK: 2018-19**

**CLASS: IX**

Dear students

India is a country of rich history and culture and this reflects more in different forms of artistic building structures. But urbanization is somehow stealing the real essence of Indian architecture. We cannot deny the fact that our country is transforming rapidly, and during this process, our cities are totally losing the very essence that once made them unique.

There is a big debate about where this ‘development’ would lead India to. In the quest to become ‘modern’ will India lose its real soul and uniqueness? What can be the futuristic style of Indian architecture? You need to think of it and then plan to make a working model of a futuristic building to be displayed in the **Pragati Visionary Exhibition-2018** to be held in the month of August this year.

**Theme: Indian Architecture for classes X-A and X-D**

**Theme: Indian Space research programme for classes X-B and X-C**

**Social Science**

**Class: IX A**

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| --- | --- |
| **Roll No.** | **3D Model to be Prepared** |
| 1 to 7 | The Great Bath (Indus Valley Civilization)  |
| 8 to 14 | Rashtrapati Bhawan |
| 15 to 21 | Qutub Minar |
| 22 to 28 | Sanchi Stupa |
| 29 to 35+ | Gateway of India |

**Class: IX D**

|  |  |
| --- | --- |
| **Roll No.** | **3D Model to be Prepared** |
| 1 to 7 | Red Fort |
| 8 to 14 | Victoria Memorial, Kolkata |
| 15 to 21 | Church of Sacred Heart |
| 22 to 28 | Jantar Mantar Observatory |
| 29 to 35+ | A temple of Dravidian Architecture |

* Make a chart related to the model assigned
* Material suggested: Sun board, thermocol sheet, pastel sheets, ice sticks etc.
* Trace the history of the site/monument
* Explain all the mathematical concepts used for |Time calculation in architecture of Jantar Mantar
* Find out the material used in making of it.
* Special features that make it one of the most distinct site to be visited by the tourists from all over India and abroad every year
* Architectural design/pattern that make it sustainable and safer one.

 CLASS-IX B & C

* Make an album using A3 size colored sheet (not more than 6 sheets) for pictorial depiction on “Role of Satellites and space organization in preparedness for Natural Disaster” and think of the mitigation strategy for the same as per the Roll no. given below:-
* Roll No. 1-15 : Earthquake
* Roll No. 16-35: Cyclone

**Class IX Homework**

**Science**

1. Revise all the chapters done in class
2. Complete the question bank related to topic Natural Resources(Biology) , Graphical representation of motion (Physics) and Is matter around us pure(Chemistry)
3. **Class IXA and IX D:**

Collect information on any salient feature/ scientific principle used in the construction plan of the architectural building **assigned to your roll number in social science section.**

Present it aesthetically on A3 size sheets with font size 72 for heading and 44 for explanation with a picture. (Example: Dome of Golconda fort entrance is designed in a way that the sound reverberates and reaches the distance of one kilometre with using a microphone).

**IX C**

* + 1. **Roll no. 1 to 10:** Make a model of various types of satellite moving around Earth. Make a presentation on A 3 sized sheets using the font size 72 for heading and 44 for explanation about the history of Indian Space Research Program with pictures.
		2. **Roll no.11 to 20:** Make a model of space shuttle. Make a presentation on A 3 sized sheets using the font size 72 for heading and 44 for explanation about Indian satellites usage and history
		3. **Roll no 21 to 30:** Make a model of cameras installed in the satellite and a presentation on A 3 sized sheets about the Collaboration of other countries with India for space research program
		4. **Roll no.31 to last:** Make a model showing various payloads of satellites and their usage. Make a model of various types of satellite moving around Earth. Make a presentation on A 3 sized sheets using the font size 72 for heading and 44 for explanation about futuristic plans of ISRO and their space research program.

 **I X B**

* + 1. **Roll no 1 to 10:** Make a model showing the interior of the satellite. Make a presentation on A 3 sized sheets using the font size 72 for heading and 44 for explanation about their application in the satellite.
		2. **Roll no. 11 to 20:** Make a model showing the launch of a satellite .Make a presentation on A 3 sized sheets using the font size 72 for heading and 44 for explanation about various stages of satellite launch.
		3. **Roll no. 21 to 30:** Make a model showing the space craft used for launching the mars rover for Mars orbital mission. Make a presentation on A 3 sized sheets using the font size 72 for heading and 44 for explanation about the cost effectiveness of the project and the reason behind it.
		4. **Roll no 31 to last**: Make a model showing the working of satellite in different fields. Make a presentation on A 3 sized sheets using the font size 72 for heading and 44 for explanation about journey of space program in a year and how to get entry in ISRO

**Class IX Homework**

**Mathematics**

* Revise the all the topics covered so far.
* Do the question bank given on the topic “Lines and Angles” and "Polynomials”.

**Class IX A and IX D**

Study the old Indian monuments and explain the following

Roll no. 1 to 18

* Why in Old Indian architecture Dome like structure is made to reduce Surface area of that part?
* How arch like structure is useful in reducing average weight exerted to the door by building using simple mathematical concept?

Roll No. 19-35

* Why for more ventilation and proper illumination square windows are more useful than rectangular or circular windows?
* What are the mathematical concept used in calculation of time in Sun Dial at Jantar Mantar

**Class IX B and IX C**

Studies the Indian space research programs executed by ISRO and explain the following:

**Roll no. 1 to 18**

* Collect the data of number of satellites launched by India and other countries on yearly basis starting from year 2008 and show it by means of bar graph and Ogive.
* Draw a pie chart showing different revenue generation area of Indian Space Research Organisation.

**Roll No. 19-35**

* Collect the data of average cost of a satellite on year on year basis.
* Represent this data in double bar group one bar for number of satellites launched and other for average cost of satellites.

ENGLISH HOLIDAY HOMEWORK: CLASS IX

IX-A& IX - D

## Task 1) ‘Adopt a Heritage’: Should India let private companies manage tourism at top monuments?

## Archaeologists have mixed reactions to the Ministry of Tourism project that will allow private firms to take over tourist facilities at heritage sites. What are you views on the same? Prepare a debate with stated facts and figures for the Debate Competition which will be held in July during the English Month.

**Task 2) Collage Making and Slogan Writing:** When we talk about exploring different parts of the World, India is one country which always has a lot of visitors from all round the globe. You can always find that rush in the major cities Delhi, Jaipur, Lucknow, Kolkata etc. Who would not love to explore theses enchanting cities?

These are some of the major tourist places to visit in India, with its magnificent glory of culture, tradition and its people. You must have visited any one or some of the best places in Delhi like Qutub Minar, Tomb, The Red Fort, Rashtrapati Bhawan, and Jantar Mantar Observatory etc. are beautiful architectures. Don’t miss a chance to visit them if you have not visited yet.

Present the experiences of your visit to different places in or around your city in form of illustrations (pictures which can be drawn or can be cut-outs) to make a collage on an A3 sheet .Label the illustrations in your collage and also add a sentence describing it.

 Write a suitable slogan/title on the collage.

Be a young creative genius and make a souvenir (a thing that is kept as a reminder of a person, place, or event.) for your friend using waste or reusable materials at home. (Eg -a paper bag made of recycled paper or newspaper with pictures painted on it or a book mark with a write up of the place of visit or a pen holder using painted ice-cream sticks/spoons)

**Task 3):** The architecture of [India](https://en.wikipedia.org/wiki/India) is rooted in its [history](https://en.wikipedia.org/wiki/History_of_India), [culture](https://en.wikipedia.org/wiki/Culture_of_India) and [religion](https://en.wikipedia.org/wiki/Indian_religions). Indian architecture progressed with time and assimilated the many influences that came as a result of [India](https://en.wikipedia.org/wiki/History_of_India)'s global discourse with other regions of the world throughout its millennia-old past. The architectural methods practiced in India are a result of examination and implementation of its established building traditions and outside cultural interactions.

Keeping in mind the long way we have come when it comes to making India - A Modern National State. Spread the wings of your imagination and energise your flight as you design a Brochure on the following Monuments:

IX – A Roll no. 1- 18: Sanchi Stupa Roll no. 19 and **above:** Gateway of India

### IX– B Roll no. 1- 18: Victoria Memorial, Kolkata

###  Roll no. 19 and above: Jantar Mantar Observatory

IX-C & IX -B

**Task 1)** Space exploration is beneficial to mankind in many ways. Space exploration and astronomy in general allow us to learn more about our home, the Earth. We are now aware of the existence of other planets, stars, and galaxies that exist beyond it. However a big proportion of expenditure is being spent on exploring the space. It is argued that this capital should be spent on other important things rather than on space exploration. **What is your opinion? Prepare a debate** with stated facts and figures for the **Debate Competition** which will be held in July during the English Month.

**Task 2) Roll no. 1 to 18:** The date is April 22nd 2038, and you have just arrived at a planet that is similar to our Earth.  You will live there for 20 years.  Make notes to describe the planet. Includes a discussion on what 10 things to bring.

The date is now April 29th, one week after you landed on the new planet.  Write a short story (use the **past tense**) and write about what happened during the first week. 

Task 3) **Roll no. 19 and above:** Read the article below and then answer the questions

APOPHIS: Killer Asteroid?

How old will you be on Friday 13, 2029? That is how old you will be when a large asteroid, called Apophis, comes very, very close to our planet. Asteroids are rocks that circle the sun in space and sometimes come close to Earth and even hit it. Most asteroids are very small and, if you are lucky, you can sometimes see them in the night sky as ‘falling stars’. However, most scientists believe one large asteroid, about six to twelve kilometers across, hit the earth and killed all the dinosaurs about 65 million years ago. Apophis is also big. Scientists discovered it in 2004 and they say that it is about 300 meters across. That’s about the size of a large sports stadium. An asteroid this size, according to scientists, is not large enough to destroy our world, but it is large enough to destroy several cities. It will probably miss the earth, they say, but not by very much –it will miss us by about 35,000 kilometers –that’s much closer than our moon which is about 240,000 kilometers away. Another way of thinking about it is that it will miss us by only a few minutes.

If you don’t find that scary, then consider this: the same asteroid will visit earth just a few years later, in 2036, again on Friday 13. Again, it will miss our planet, but again by only a very small distance... probably. The only sure thing is that all the eyes and telescopes in every country in the world will be watching the skies on those two days.

1. The article is about an asteroid.

(a) TRUE

(b) FALSE

(c) It doesn’t say.

2. Falling stars are rocks.

(a) TRUE

(b) FALSE

(c)It doesn’t say.

3. In Paragraph 1, what does ‘it’ refer to?

(a) Space

(b) Earth

(c) Apophis

4. How large is the Apophis asteroid?

(a) six meters across

(b) twelve kilometers across

(c) 300 meters across

5.Apophis killed all the dinosaurs 65 million years ago.

(a) TRUE

(b)FALSE

(c) It doesn’t say.

6.Why are scientists worried?

(a) Apophis might destroy our world.

(b) Apophis might miss us.

(c)Apophis might destroy many cities.

7.In Paragraph 2, what does ‘they’ mean?

(a) Asteroids

(b) Scientists

(c) Cities

8.How far away is the moon from Earth?

(a) Only a few minutes away

(b) 35,000 kilometers

(c)240,000 kilometers

9.What is the name of the asteroid that will come close to Earth in 2036?

(a) Apophis

(b) Scientists don’t know what to call it

(c)It doesn’t say.

10.Scientists are sure that the Apophis asteroid will miss our planet.

(a) TRUE

(b) FALSE

(c)It doesn’t say.

Complete the article by writing the correct words.

How old (1)\_\_\_\_\_you be on Friday 13, 2029? That is how old you will be when a large asteroid, called Apophis, comes very, very close to (2)\_\_\_\_\_planet. Asteroids are rocks that circle the sun in space and sometimes (3)\_\_\_\_\_close to Earth and

Even hit it. Most asteroids are very small and, if you are lucky, you can sometimes see (4)\_\_\_\_\_in the night sky as ‘falling stars’. However, most scientists (5)\_\_\_\_\_one large asteroid, about six to twelve kilometers across, hit the earth and killed all the dinosaurs about 65 million years ago. Apophis is also big. Scientists (6)\_\_\_\_\_it (7)\_\_\_\_\_2004 and they say that it is about 300 meters across. That’s about the size of a large sports stadium. An asteroid this size, according to scientists, is (8)\_\_\_\_\_large enough to destroy our world, but it is large enough to destroy several cities. It will probably miss the earth, they say, but not by very much ,it will miss (9)\_\_\_\_\_by about only 35,000 kilometers –that’s much closer than our moon which is about 240,000 kilometers away. Another way of thinking about it is that it will(10)\_\_\_\_\_us by only a few minutes. If you (11)\_\_\_\_\_find that scary, then consider this: the same asteroid will visit earth just a few years later, in 2036, again on Friday 13. Again, it will miss our planet, but again by only a very small distance ... probably. The only sure thing is that all the eyes and telescopes in every country in the world will be watching the skies

(12)\_\_\_\_\_those two days.

DESCRIPTIVEWRITING:

“Write about some ways that we can protect our planet from large asteroids.”