

SCIENCE HOLIDAY HOMEWORK

CLASS IX



SHARDA INTERNATIONAL SCHOOL.



“ The time for break, the time to rest and the time to rejuvenate SELF ”

Enjoy your summer vacation

Dear Parents & Students

Vacation is an excellent time to learn new skills. It is a welcome break for the children to enjoy and explore things in their own way. Here are some interesting and fun-filled activities for the children to learn and keep them occupied during the holidays.

1. Revise the explained chapters with all extra questions-answers.
2. Read and prepare a science dictionary from the following chapters including 10 words from each chapter:
 1. Matter in our surroundings
 2. Is matter around us pure
 3. The fundamental unit of life
 4. Motion
 5. Force and laws of motion
3. **Choose any one topic from the following to make a model from eco friendly material available at home:**

a) To prove law of reflection of light. (Refer activity 12.5 on page 167)

b) Tyndall Effect Activity. For reference:
<https://www.youtube.com/watch?v=FvSxcUNtew8>

c) Making a toy car based on newton' law.
<https://www.youtube.com/watch?v=wHE3cLICgs0>

d) Plant cell

4. **Prepare a question bank from following chapters including 5 MCQ and 5 Assertion Reason Questions with answers from each chapter. Write it on A4 sheets.**

- a) Matter in our surroundings
- b) Is matter around us pure
- c) The fundamental unit of life
- d) Motion
- e) Force an laws of motion

5. International Yoga Day will be celebrated on 21 June across the world with great enthusiasm. Yoga is helping people to stay energetic and have strong immune system. Find yoga exercises that help you to strengthen your respiratory system and increase the oxygen level in the body. Write about them and paste the related pictures. (To be done on A-4 size sheets)

Do all the written work on loose sheets and discuss your problems with teachers during the submission of work.

6. Indulge yourself in some physical activity like Yoga and deep breathing exercises in the morning.
7. Add protein rich food in your meal to boost your immunity.
8. Complete the integrated project assigned according to the group in class.

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CLASS X



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1. Revise the explained chapters with all extra questions-answers.
2. Read and prepare a science dictionary from the following chapters including 10 words from each chapter:
 - i Chemical, Reactions and Equations
 - ii Life Processes
 - iii Light- Reflection and Refraction
 - iv Acids, Bases and Salts
 - v Control and Coordination

3. **Answer the following questions on loose sheets.**

- I. Discuss the process of inhalation during breathing II. Draw diagram and write a short note of human.
 - a) Respiratory System
 - b) Digestive System. Write stepwise mechanism of digestion through the gut (tabular form).
 - c) Excretory system
- III. Write the chemical formula of the following compounds.
(i) Lime (ii) Nitric Acid (iii) Plaster of Paris (iv) Sodium acetate (v) Baking soda (vi) Washing soda (vii) Bleaching powder (viii) King of chemical (ix) Lime stone (x) Common Salt
- IV. Write the formula of acid and base used to form the given salts.
(i) Potassium Sulphate (ii) Zinc Chloride (iii) Ammonium Chloride (iv) Barium Sulphate.
- V. Write the name of acid present in the following.
(i) Apple (ii) Curd (iii) Vinegar (iv) Lemon (v) Orange (vi) Bee sting (vii) Tamarind
- VI. Write the name of some (at least 10) chemical compounds that you use in your day to day life. Classify them as acids, bases and salts.
- VII. Write formula of 5 chemical substances which contain:
a) Sulphate b) Acetate c) Hydroxide d) Bicarbonate e) Nitrate VIII.

Draw the following diagrams:

- a) Cases of image formation through lens.
 - b) Cases of image formation through mirror.
 - c) Detail diagram of Human eye.
- IX. The diagram shows a dish antenna which is used to receive television signals from a satellite. The antenna (signal detector) is fixed in front of the curved dish.



- (a) What is the purpose of the dish?

- (b) Should it be concave or convex?
- (c) Where should the antenna be positioned to receive the strongest possible signals?
- (d) Explain what change you would expect in the signals if a large dish was used?
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 5. Prepare a question bank from following chapters including 5 MCQ and 5 Assertion Reason Questions with answers from each chapter. Write it on A4 sheets and make a PDF.
 - a) Chemical, Reactions and Equations
 - b) Life Processes
 - c) Light- Reflection and Refraction
 - d) Acids, Bases and Salts
 - e) Control and Coordination

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