

VACATION HOME WORK

PHYSICS

CLASS : VII

1. To make a mind map of chapter heat & motion and time.
2. To complete nda copy of chapter heat & motion and time.

CLASS : VIII

1. To make a mind map of chapter force and pressure & friction.
2. To complete nda copy of chapter force and pressure & friction.

CLASS : IX

1. To make a mind map of chapter motion , force and laws of motion & gravitation.
2. To complete nda copy of chapter motion , force and laws of motion & gravitation.

CLASS : X

1. To make a mind map of chapter light & human eye and its colourful world.
2. To complete nda copy of chapter light & human eye and its colourful world.

CHEMISTRY

Winter vacation assignment 2024-2025

Class -VII

- 1) Make a project on of Soil test, by the help of china rose solution
- 2) Make a project on chemical Changes of every day life, (use, poster, paper Cutting.)
- 3) 30 MCQ on physical and chemical change

Class-VIII

- 1) Make a project on fire extinguisher. (Use diagram poster)
- 2) Make a project on biosphere, and national park.
- 3) 30-MCQs on Combustion and flame.

Class-IX

- 1) Make a project on laws of chemical combination (Use diagrams and flowchart).
- 2) Make project on Atomic Model.
- 3) Write 30 MCQs on - Atoms and molecules.

Class-X

- 1) Make a project on chemical reaction of Metal in everyday life.
- 2) Make a project on metallurgical operation (Extraction of metal).
- 3) Write 30 MCQs of Metal and Non-metal (CBSE-MCQ).

Sub: Biology

Class VIII A

1. Make a Project on 'Sexual Reproduction in Human beings'.
2. Make a list of various reproductive modes occurring in the living organisms.
3. What are various types of Asexual Reproduction in living organisms?
4. Draw and label diagrams of human Male and Female Reproductive system.
5. Complete Q/A of the chapter 'Microorganisms'.

Class IX A+B

1. Sketch the diagrams of Cell organelles.
2. On chart paper draw and label the diagrams of Plant's Meristematic Tissues.
3. Discuss models of Plasma membrane with suitable diagrams.

Class X A

1. Make a project on the topic 'Chlorophyll is essential for photosynthesis'.
2. Draw and label the diagrams of Reflex Action and nerve synapse.
3. Make a flow chart of Impulse transfer in human nervous system by means of neurons.
4. Make a list of Endocrine glands and their secretions.
5. Draw and label diagram of a typical Nephron.

CLASS 10 B
VACATION HOMEWORK
BIOLOGY BY PK VERMA

Answer the following questions:-

Case 1: Human Reproductive Health *A couple is planning to have a baby and consults a doctor for advice on maintaining reproductive health. The doctor explains the importance of nutrition, exercise, and avoiding harmful habits such as smoking and alcohol consumption during this phase.*

1. Why is maintaining reproductive health crucial for both parents before conception? Explain the role of lifestyle factors in reproductive health.
2. Discuss how smoking and alcohol can affect the reproductive health of an individual and the developing fetus.

Case 2: Menstrual Cycle and Fertility *Riya is a 16-year-old girl who has just started learning about the menstrual cycle in her biology class. She is curious to know how the timing of ovulation relates to fertility and pregnancy.*

3. Explain the process of ovulation and how it is connected to the menstrual cycle. When is the most fertile period for a woman, and why?
-

Case 3: Pollination in Plants *In a flowering plant species, pollination occurs primarily through the wind. Due to an unexpected change in the environment, the wind patterns have changed, leading to reduced pollination.*

4. What is pollination, and how does wind contribute to it in this case? What could be the impact on plant reproduction if pollination fails to occur?
-

Case 4: Assisted Reproductive Technologies (ART) *A couple facing infertility problems decides to opt for Assisted Reproductive Technologies (ART) to conceive a child. They are considering options like in-vitro fertilization (IVF).*

5. What is IVF and how does it help in solving infertility issues? Mention the steps involved in the IVF process.
-

Case 5: Seed Dispersal and Plant Reproduction *A botanist notices that in a certain region, the seeds of plants are not spreading far from the parent plants, resulting in overcrowding and competition for resources.*

6. Explain the importance of seed dispersal in plant reproduction. Describe two natural methods plants use for seed dispersal and how these methods help prevent overcrowding.

CLASS 8 B
VACATION HOMEWORK
BIOLOGY BY PK VERMA

Answer the following questions: -

Case 1: Physical Changes During Adolescence *Raj, a 13-year-old boy, notices that his voice has started to deepen, and he is growing taller. He is curious and asks his parents about these changes.*

1. What are the physical changes Raj is experiencing? Explain why these changes occur during adolescence.
-

Case 2: Emotional Changes *Seema, who is 12 years old, often feels emotional and gets upset quickly. She finds it difficult to understand her mood swings and talks to her older sister for advice.*

2. Why do adolescents experience mood swings and emotional changes? How can young people manage these emotional changes effectively?
-

Case 3: Role of Nutrition *During a school health check-up, the doctor advises 14-year-old Neha to eat a balanced diet rich in iron and calcium, as she is entering adolescence.*

3. Why is a balanced diet important during adolescence? Explain the role of iron and calcium in the body during this phase.
-

Case 4: Peer Pressure *Akash, a 15-year-old, feels pressured by his friends to try smoking, although he knows it's harmful. He is unsure how to deal with this peer pressure.*

4. What is peer pressure, and how can it affect adolescents' decisions? Suggest strategies Akash can use to resist negative peer pressure.
-

Case 5: Personal Hygiene *During adolescence, Sweety's biology teacher emphasizes the importance of maintaining personal hygiene, especially due to increased sweating and oily skin.*

5. Why is personal hygiene important during adolescence? Discuss the changes in the skin and body that make hygiene a priority during this stage.
-

**CLASS 7 A & B
VACATION HOMEWORK
BIOLOGY BY PK VERMA**

Answer the following questions: -

Case 1: Human Circulatory System *Amit, a 12-year-old boy, is running a race during his school sports day. After a few laps, he feels his heart beating faster, and he starts breathing heavily.*

1. Why does Amit's heart rate increase while running? Explain how the circulatory system helps supply oxygen and nutrients to his body during physical activity.
-

Case 2: Plant Water Transport *During a class experiment, Meena places a celery stalk in a glass of colored water. After a few hours, she observes the color rising up the stalk and reaching the leaves.*

2. How is water transported in plants from roots to leaves? Describe the role of xylem in this process, based on Meena's observation.
-

Case 3: Blood Donation *Rahul's father donates blood at a blood donation camp. Rahul is curious about how blood travels in the body and asks his father what happens after someone donates blood.*

3. How does the blood circulate through the body after donation? Explain the role of the heart and blood vessels in maintaining circulation.
-

Case 4: Transpiration in Plants *In a botany class, students place plastic bags over the leaves of a plant to observe water droplets forming inside the bag after a few hours.*

4. What is transpiration in plants, and how does it help in the movement of water? Explain the role of stomata in this process, referring to the students' experiment.
-

Case 5: Human Excretory System *Suhana learns in her biology class that her kidneys play an important role in removing waste from her body. She wonders how waste products are transported to the kidneys.*

5. How are waste products transported in the human body to be excreted? Describe the function of the blood and the kidneys in this process.