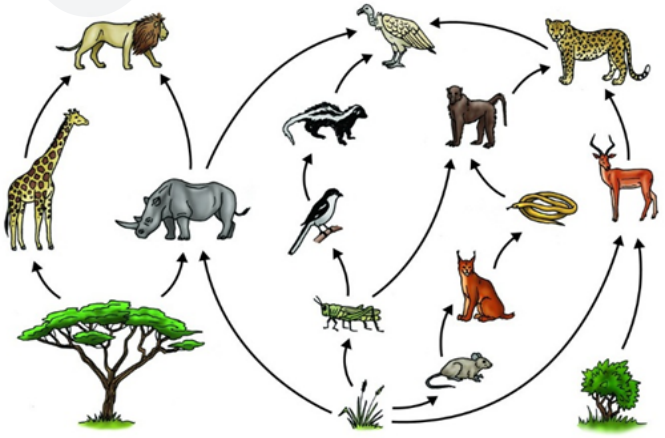
TEACHER NAME	Amandeep Singh
SCHOOL NAME	PM Shri KV 2 Ferozepur cantt
GRADE	8
CHAPTER NAME	Chapter 12-How Nature Works in Harmony
CONCEPT	Food chain and Food webs
GENERAL SCIENCE COMPETENCY	Evaluating and designing scientific enquiry
NCF COMPETENCY	C-3.3 Analyses patterns of relationships between living organisms and their environments in terms of dependence on and response to each other
LEARNING INDICATOR	Analyzes the interactions among organisms within a food chain and food web.
QUESTION 1	Observe the given food web below.  What will happen if grasshoppers are removed from the food web?
OPTION A	The population of sparrow increases
OPTION B	The population of rats decreases
OPTION C	The population of vultures decreases
OPTION D	The population of deer increases

KVS & SAS

CORRECT OPTION	OPTION C

TEACHER NAME	Amandeep Singh
SCHOOL NAME	PM Shri KV 2 Ferozepur cantt
GRADE	8
CHAPTER NAME	Chapter 9- The Amazing World of Solutes, Solvents, and Solutions
CONCEPT	Solution
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-1.1 Classifies matter based on observable physical (solid,liquid, gas, shape, volume, density, transparent,opaque, translucent, magnetic, non-magnetic,conducting, non-conducting) and chemical (pure,impure; acid, base; metal, non-metal; element,compound) characteristics
LEARNING INDICATOR	differentiates between saturated and unsaturated solutions in a given context
QUESTION 2	During an experiment, Sahil dissolved sugar in water. The table below shows his observations: **Solution** / **Temperature** / **Sugar Added** / **Observation** P / 25°C / 20 g / Completely dissolves Q / 25°C / 25 g / Some sugar remains undissolved R / 60°C / 25 g / Completely dissolves Which of the following option correctly classifies the solutions?
OPTION A	P – Saturated, Q – Unsaturated

KVS & SAS

OPTION B	R – Unsaturated, Q – Saturated
OPTION C	R – Saturated, P – Unsaturated
OPTION D	P - Unsaturated, R - Saturated
CORRECT OPTION	OPTION B

TEACHER NAME	SHUBHDA CHAMOLI
SCHOOL NAME	KV RISHIKESH
GRADE	8
CHAPTER NAME	Chapter 8 - Nature of Matter: Elements, Compounds, and Mixture
CONCEPT	Mixtures and its types
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-1.1 Classifies matter based on observable physical (solid,liquid, gas, shape, volume, density, transparent,opaque, translucent, magnetic, non-magnetic,conducting, non-conducting) and chemical (pure, impure; acid, base; metal, non-metal; element,compound) characteristics
LEARNING INDICATOR	classifies mixtures as uniform and non-uniform
QUESTION 3	The teacher showed some pictures in class and asked the students to classify them based on the type of mixture. Gauri divided the mixtures into two groups. **Group 1** / **Group 2** Milk / Soil Vinegar / Cereals in milk Honey / Tomato ketchup Lemonade / Fruit salad Which of these did she place in the wrong group?

KVS & SAS

OPTION A	Vinegar
OPTION B	Honey
OPTION C	Tomato ketchup
OPTION D	Fruit salad
CORRECT OPTION	OPTION C

TEACHER NAME	KAVITA NARULA
SCHOOL NAME	K V NO. 1 AFS, SEC-14 GURUGRAM
GRADE	8
CHAPTER NAME	Chapter 13- Our Home: Earth, a Unique Life Sustaining Planet
CONCEPT	Earth vs planets of our solar system
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-3.4 Explains the conditions suitable for sustaining life on Earth and other planets (atmosphere; suitable temperature-pressure, light; properties of water)
LEARNING INDICATOR	compares the characteristics of various planets with the Earth (size, distance from sun)
QUESTION 4	The table below shows information about four different planets. **Planet** | **Average temperature** | **Radius compared to the Earth** | **Has an atmosphere?** Planet 1 | 170 | 0.33 | No Planet 2 | 15 | 1 | Yes Planet 3 | 200 | 9 | No Planet 4 | -110 | 11 | Yes Which planet is most suitable for life based on the given data?
OPTION A	Planet 1

KVS & SAS

OPTION B	Planet 2
OPTION C	Planet 3
OPTION D	Planet 4
CORRECT OPTION	OPTION B

TEACHER NAME	KAVITA NARULA
SCHOOL NAME	K V NO. 1 AFS, SEC-14 GURUGRAM
GRADE	8
CHAPTER NAME	Chapter 13- Our Home: Earth, a Unique Life Sustaining Planet
CONCEPT	Threats to life on Earth
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-3.4 Explains the conditions suitable for sustaining life on Earth and other planets (atmosphere; suitable temperature-pressure, light; properties of water)
LEARNING INDICATOR	applies sustainable conservation practices in daily life (reducing waste, recycling, renewable energy usage)
QUESTION 5	A village is facing water scarcity. The community decides to adopt sustainable measures to conserve water. Which of the following should they practice?
OPTION A	Digging more borewells and overusing groundwater
OPTION B	Diverting river water without permission
OPTION C	Using bottled water for all purposes
OPTION D	Rainwater harvesting, repairing leaks, and reusing greywater
CORRECT OPTION	OPTION D

TEACHER NAME	RAJESH KUMAR G C
SCHOOL NAME	PM SHRI KV PANGODE, TVM
GRADE	8

CHAPTER NAME	Chapter 10- Light: Mirrors and Lenses
CONCEPT	Lenses
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-2.4 Demonstrates rectilinear propagation of light from different sources (natural, artificial, reflecting surfaces), verifies the laws of reflection through manipulation of light sources and objects and the use of apparatus and artefacts (such as plane and curved mirrors, pinhole camera, kaleidoscope, periscope)
LEARNING INDICATOR	Identifies the objects used in daily life that can work as a lens
QUESTION 6	Arun, while playing in his room, observed something as shown in the picture. Which optical device can be related to the **object** in the figure?
OPTION A	Plane mirror
OPTION B	Convex lens
OPTION C	Concave lens
OPTION D	Concave mirror
CORRECT OPTION	OPTION B

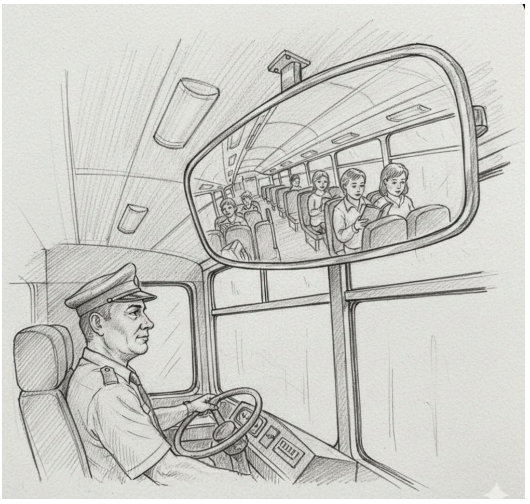
KVS & SAS

TEACHER NAME	RAJESH KUMAR G C
SCHOOL NAME	PM SHRI KV PANGODE, TVM
GRADE	8
CHAPTER NAME	Chapter 12-How Nature Works in Harmony
CONCEPT	Balancing the ecosystem
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-3.1 Describes the diversity of living things observed in the natural surroundings (insects, earthworms, snails, birds, mammals, reptiles, spiders, diverse plants, and fungi), including at a smaller scale(microscopic organisms)
LEARNING INDICATOR	Identifies different types of interactions among organisms
QUESTION 7	The picture shows an ecological interaction. Which type of ecological interaction is displayed?
OPTION A	Parasitism
OPTION B	Mutualism
OPTION C	Predation
OPTION D	Competition
CORRECT OPTION	OPTION B

KVS & OAS

TEACHER NAME	RAJESH KUMAR G C
SCHOOL NAME	PM SHRI KV PANGODE, TVM
GRADE	8
CHAPTER NAME	Chapter 12-How Nature Works in Harmony
CONCEPT	Food chain and Food webs
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-3.1 Describes the diversity of living things observed in the natural surroundings (insects, earthworms, snails, birds, mammals, reptiles, spiders, diverse plants, and fungi), including at a smaller scale (microscopic organisms)
LEARNING INDICATOR	Identifies producers and consumers in a given ecosystem.
QUESTION 8	Students observed the pond as given below. Which organism among the following options acts as the primary consumer in this ecosystem?

OPTION A	Frog
OPTION B	Large fish
OPTION C	Green algae
OPTION D	Pond insects
CORRECT OPTION	OPTION D

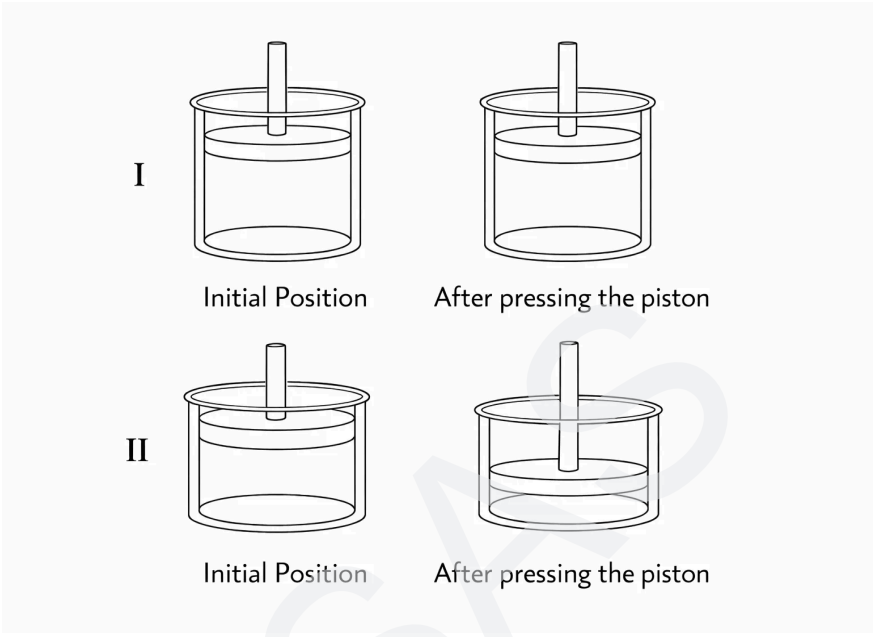
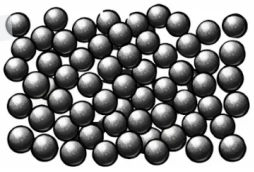
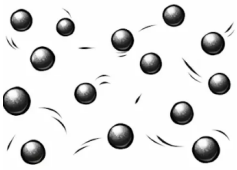
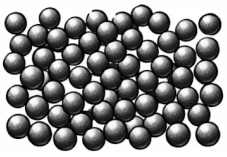
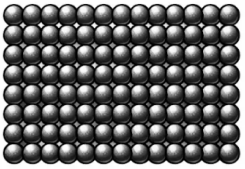
TEACHER NAME	RAJESH KUMAR G C
SCHOOL NAME	PM SHRI KV PANGODE, TVM
GRADE	8
CHAPTER NAME	Chapter 10- Light: Mirrors and Lenses
CONCEPT	Spherical mirrors
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-2.4 Demonstrates rectilinear propagation of light from different sources (natural, artificial, reflecting surfaces), verifies the laws of reflection through manipulation of light sources and objects and the use of apparatus and artefacts (such as plane and curved mirrors, pinhole camera, kaleidoscope, periscope)
LEARNING INDICATOR	identifies the nature of image formed by different mirrors
QUESTION 9	 Which ***mirror and image type*** match this case?

KVS & SAS

OPTION A	Plane mirror, real image
OPTION B	Convex mirror, virtual image
OPTION C	Concave mirror, real image
OPTION D	Concave mirror, virtual image
CORRECT OPTION	OPTION B

TEACHER NAME	SANGEETA SINNI
SCHOOL NAME	PMSHRI KV CRPF RANCHI
GRADE	8
CHAPTER NAME	Chapter 7 - Particulate Nature of Matter
CONCEPT	Movement of particles in Matter
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-1.4 Observes and explains the phenomena caused due to differences in pressure, temperature, and density (e.g., breathing, sinking-floating, water pumps in homes, cooling of things, formation of winds)
LEARNING INDICATOR	compares the compressibility of different substances
QUESTION 10	Nikhil has two identical vessels, I and II, each fitted with a movable piston. He fills the vessels with two different materials and presses the piston in each case.The picture below shows the change observed in the position of the piston in vessels A and B.

KVS & SAS

	 Which of the following correctly describes the materials in vessels I and II?
OPTION A	I 
OPTION B	I 
OPTION C	II 
OPTION D	II 
CORRECT OPTION	OPTION -A

TEACHER NAME	SANGEETA SINNI

SCHOOL NAME	PM SHRI KV CRPF RANCHI
GRADE	8
CHAPTER NAME	Chapter 10- Light: Mirrors and Lenses
CONCEPT	Lenses
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-2.4 Demonstrates rectilinear propagation of light from different sources (natural, artificial, reflecting surfaces), verifies the laws of reflection through manipulation of light sources and objects and the use of apparatus and artefacts (such as plane and curved mirrors, pinhole camera, kaleidoscope, periscope)
LEARNING INDICATOR	Identifies the nature (real/inverted and enlarged/diminished) of image formed by different lenses in a given situation
QUESTION 11	Arjun uses a lens to see a car at different distances Situation I Situation II Which of the following correctly describes the lens and its corresponding situation?
OPTION A	Situation I - Concave lens, the car is closer to the lens
OPTION B	Situation I - Concave lens, the car is farther from the lens
OPTION C	Situation II - Convex lens, the car is closer to the lens
OPTION D	Situation II - Convex lens , the car is farther from the lens

CORRECT OPTION	OPTION - D

TEACHER NAME	LALIT MOHAN SINGH
SCHOOL NAME	PM SHRI KENDRIYA VIDYALAYA CHHATARPUR
GRADE	8
CHAPTER NAME	Chapter 8 - Nature of Matter: Elements, Compounds, and Mixture
CONCEPT	Mixtures and its types
GENERAL SCIENCE COMPETENCY	Evaluating and designing scientific enquiry
NCF COMPETENCY	C-1.1 Classifies matter based on observable physical (solid,liquid, gas, shape, volume, density, transparent,opaque, translucent, magnetic, non-magnetic,conducting, non-conducting) and chemical (pure,impure; acid, base; metal, non-metal; element,compound) characteristics
LEARNING INDICATOR	infers the presence of a component in a mixture
QUESTION 12	A teacher gives four beakers labeled A, B, C, and D to his students. Each beaker contains a different substance or mixture. Then students perform simple tests and record the observations in the table below:

Beaker	**Observation on Heating**	**Observation on Separation**
A	No change; solid remains	Can be separated physically
B	Residue left after heating	Cannot be separated physically
C	No residue after heating	Cannot be separated physically

KVS & SAS

	<table><tr><td>D</td><td>Residue left after heating</td><td>Cannot be separated physically</td></tr></table> Based on the observations in the table, which statement is correct?
OPTION A	Beakers A, B, and C are mixtures
OPTION B	Beakers B, C, and D are mixtures
OPTION C	Beakers A, B, and D are mixtures
OPTION D	Beakers A, C, and D are mixtures
CORRECT OPTION	OPTION C

TEACHER NAME	LALIT MOHAN SINGH
SCHOOL NAME	PM SHRI KENDRIYA VIDYALAYA CHHATARPUR
GRADE	8
CHAPTER NAME	Chapter 9- The Amazing World of Solutes, Solvents, and Solutions
CONCEPT	Density
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-1.4 Observes and explains the phenomena caused due to differences in pressure, temperature, and density (e.g., breathing, sinking-floating, water pumps in homes, cooling of things, formation of winds)
LEARNING INDICATOR	compares densities of different materials
QUESTION 13	A student drops the same metal ball into three identical jars containing Liquid P, Liquid Q, and Liquid R from the same height. The time taken by the metal ball to reach the bottom of each jar is recorded in the table below:

KVS @ SAS

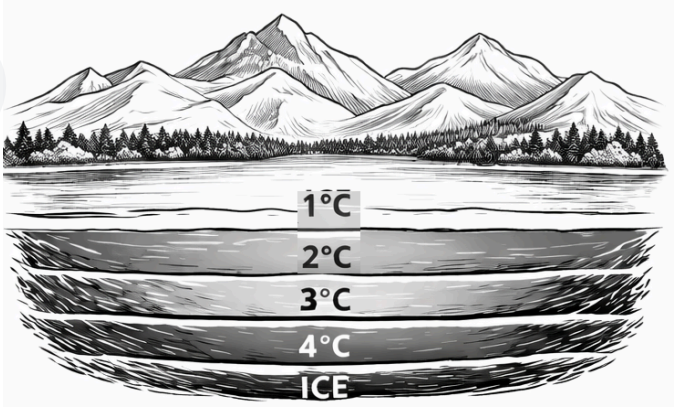
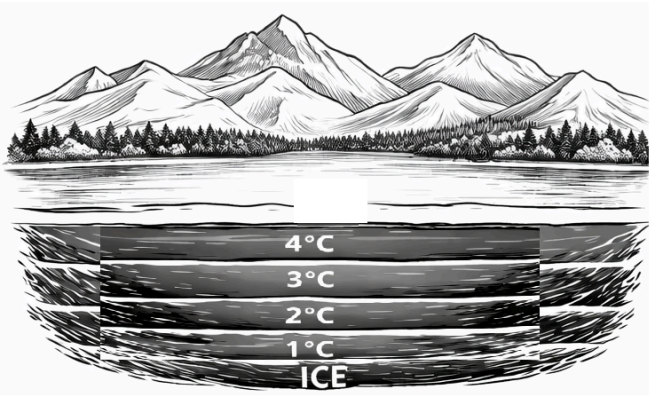
	<table><tr><th>Liquid</th><th>Time taken</th></tr><tr><td>P</td><td>More than R</td></tr><tr><td>Q</td><td>Less than R</td></tr><tr><td>R</td><td>Less than P</td></tr></table> If the three liquids were oil, honey, and water, which of the following would be correct?
OPTION A	P is oil and Q is honey
OPTION B	Q is water, and R is oil
OPTION C	R is honey, and P is water
OPTION D	Q is oil and P is honey
CORRECT OPTION	OPTION B

TEACHER NAME	LALIT MOHAN SINGH
SCHOOL NAME	PM SHRI KENDRIYA VIDYALAYA CHHATARPUR
GRADE	8
CHAPTER NAME	Chapter 12-How Nature Works in Harmony
CONCEPT	Food chain and Food webs
GENERAL SCIENCE COMPETENCY	Evaluating and designing scientific enquiry
NCF COMPETENCY	C-3.3 Analyses patterns of relationships between living organisms and their environments in terms of dependence on and response to each other
LEARNING INDICATOR	Predicts the consequences of removing a species from a food chain or food web on the ecosystem.
QUESTION 14	Aanya and Dev visited Bharatpur Bird Sanctuary, known for migratory birds. A naturalist explained that earlier, the deer population increased because there were no natural predators. Later, when one leopard migrated into the area, balance was restored. If the leopard is again removed from this ecosystem, what is

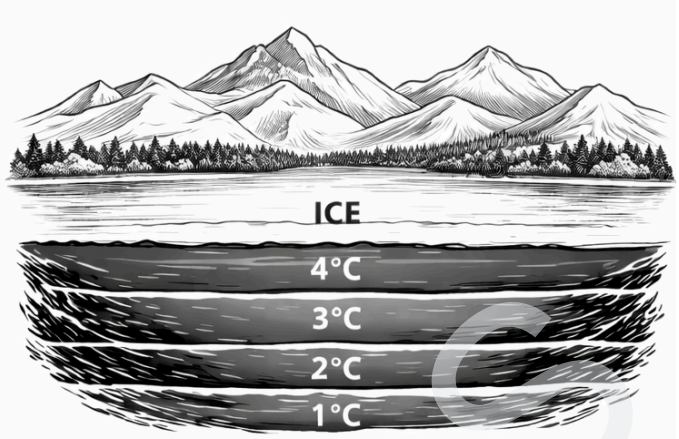
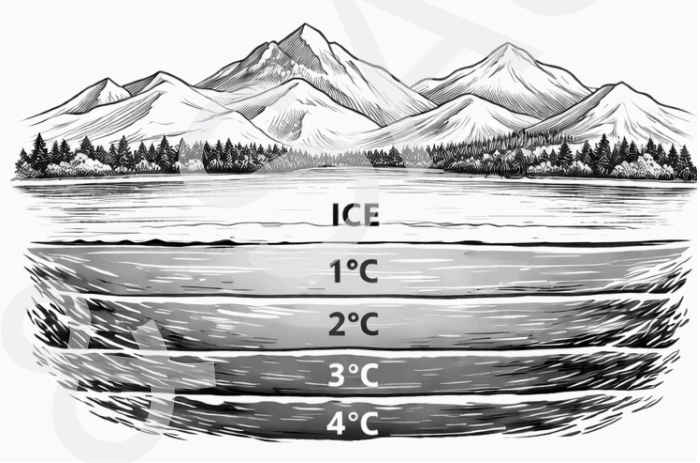
KVS & SAS

	the most likely outcome over time?
OPTION A	Decrease in vegetation
OPTION B	Increase in bird population
OPTION C	Increase in vegetation
OPTION D	Decrease in bird population
CORRECT OPTION	OPTION A

TEACHER NAME	LALIT MOHAN SINGH
SCHOOL NAME	PM SHRI KENDRIYA VIDYALAYA CHHATARPUR
GRADE	8
CHAPTER NAME	Chapter 12-How Nature Works in Harmony
CONCEPT	Balancing the ecosystem
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-3.1 Describes the diversity of living things observed in the natural surroundings (insects, earthworms,snails, birds, mammals, reptiles, spiders, diverse plants, and fungi), including at a smaller scale (microscopic organisms)
LEARNING INDICATOR	Identifies decomposers in an ecosystem
QUESTION 15	Soniya's mother discarded some food waste in the back of the garden to make natural fertiliser. After one month, she noticed that the waste had changed into fertiliser. Which of the following organisms might have helped in this process?
OPTION A	Ant
OPTION B	Cockroach
OPTION C	Housefly
OPTION D	Earthworm
CORRECT OPTION	OPTION D

TEACHER NAME	LALIT MOHAN SINGH
SCHOOL NAME	PM SHRI KENDRIYA VIDYALAYA CHHATARPUR
GRADE	8
CHAPTER NAME	Chapter 9- The Amazing World of Solutes, Solvents, and Solutions
CONCEPT	Density
GENERAL SCIENCE COMPETENCY	Evaluating and designing scientific enquiry
NCF COMPETENCY	C-1.4 Observes and explains the phenomena caused due to differences in pressure, temperature, and density (e.g., breathing, sinking-floating, water pumps in homes, cooling of things, formation of winds)
LEARNING INDICATOR	evaluates real-life consequences of density variation
QUESTION 16	Which diagram correctly shows water density changes as temperature decreases below 4°C in a Himalayan lake during the winter season?
OPTION A	
OPTION B	

KVS & SAS

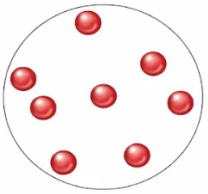
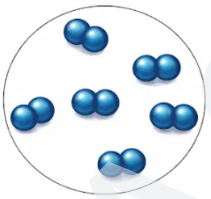
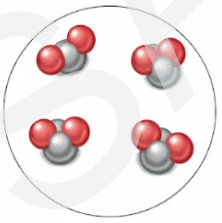
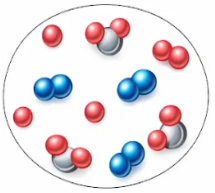
OPTION C	
OPTION D	
CORRECT OPTION	OPTION D

TEACHER NAME	LALIT MOHAN SINGH
SCHOOL NAME	PM SHRI KENDRIYA VIDYALAYA CHHATARPUR
GRADE	8
CHAPTER NAME	Chapter 12-How Nature Works in Harmony
CONCEPT	Different Ecosystems
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-3.1 Describes the diversity of living things observed in the natural surroundings (insects, earthworms, snails, birds, mammals, reptiles, spiders, diverse plants, and fungi), including at a smaller scale (microscopic organisms)
LEARNING INDICATOR	identifies the type of interactions in a habitat

QUESTION 17	Which picture best represents commensalism? I II III IV
OPTION A	I
OPTION B	II
OPTION C	III
OPTION D	IV
CORRECT OPTION	OPTION D

TEACHER NAME	SUSMITA NATH
SCHOOL NAME	PMSHRI K V NARANGI
GRADE	8
CHAPTER NAME	Chapter 8 - Nature of Matter: Elements, Compounds, and Mixture
CONCEPT	Pure Substances: Elements
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-1.1 Classifies matter based on observable physical (solid,liquid, gas, shape, volume, density, transparent,opaque, translucent, magnetic, non-magnetic,conducting, non-conducting) and chemical (pure,impure; acid, base; metal, non-metal; element,compound) characteristics
LEARNING INDICATOR	compares elements, compounds, and mixtures in terms of their properties and composition
QUESTION 18	Which of the following represents a substance that can be separated by physical methods??

KVS & SAS

OPTION A	
OPTION B	
OPTION C	
OPTION D	
CORRECT OPTION	OPTION D

TEACHER NAME	SUSMITA NATH
SCHOOL NAME	PMSHRI K V NARANGI
GRADE	8
CHAPTER NAME	Chapter 9- The Amazing World of Solutes, Solvents, and Solutions
CONCEPT	Solubility
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-1.4 Observes and explains the phenomena caused due to differences in pressure, temperature, and density (e.g., breathing, sinking-floating, water pumps in homes, cooling of

	things, formation of winds)
LEARNING INDICATOR	compares the difference in solubility in different conditions
QUESTION 19	During a science activity, four students tried different methods to dissolve the same amount of sugar in the same amount of water. John added granulated sugar to cold water and stirred vigorously. Mahira added granulated sugar to hot water and stirred vigorously. Kriti crushed the sugar, added it to hot water, and stirred vigorously. Gurpreet crushed the sugar, added it to cold water, and stirred vigorously. Which student will dissolve the sugar in the shortest time?
OPTION A	John
OPTION B	Mahira
OPTION C	Kriti
OPTION D	Gurpreet
CORRECT OPTION	Option C

TEACHER NAME	SUSMITA NATH
SCHOOL NAME	PMSHRI K V NARANGI
GRADE	8
CHAPTER NAME	Chapter 9- The Amazing World of Solutes, Solvents, and Solutions
CONCEPT	Solubility
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-1.4 Observes and explains the phenomena caused due to differences in pressure, temperature, and density (e.g., breathing, sinking-floating, water pumps in homes, cooling of things, formation of winds)
LEARNING INDICATOR	compares the difference in solubility in different conditions

QUESTION 20	During a science activity, four students tried different methods to dissolve the same amount of sugar in the same amount of water. John added granulated sugar to cold water and stirred vigorously. Mahira added granulated sugar to hot water and stirred vigorously. Kriti crushed the sugar, added it to hot water, and stirred vigorously. Gurpreet crushed the sugar, added it to cold water, and stirred vigorously. Which student will dissolve the sugar in the shortest time?
OPTION A	John
OPTION B	Mahira
OPTION C	Kriti
OPTION D	Gurpreet
CORRECT OPTION	Option C

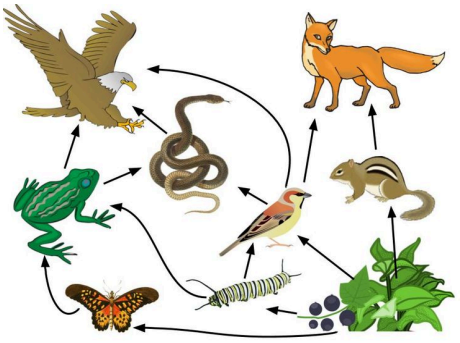
TEACHER NAME	SUSMITA NATH
SCHOOL NAME	PMSHRI K V NARANGI
GRADE	8
CHAPTER NAME	Chapter 9- The Amazing World of Solutes, Solvents, and Solutions
CONCEPT	Solubility
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-1.4 Observes and explains the phenomena caused due to differences in pressure, temperature, and density (e.g., breathing, sinking-floating, water pumps in homes, cooling of things, formation of winds)
LEARNING INDICATOR	compares the difference in solubility in different conditions
QUESTION 21	During a science activity, four students tried different methods to dissolve the same amount of sugar in the same amount of

KVS & SAS

	water. John added granulated sugar to cold water and stirred vigorously. Mahira added granulated sugar to hot water and stirred vigorously. Kriti crushed the sugar, added it to hot water, and stirred vigorously. Gurpreet crushed the sugar, added it to cold water, and stirred vigorously. Which student will dissolve the sugar in the shortest time?
OPTION A	John
OPTION B	Mahira
OPTION C	Kriti
OPTION D	Gurpreet
CORRECT OPTION	Option C

TEACHER NAME	CHANDRESH KUMARI
SCHOOL NAME	KV CUJ RAHYA SUCHANI
GRADE	8
CHAPTER NAME	Chapter 11- Keeping Time with the Skies
CONCEPT	Different Calenders
GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-2.5 Observes and identifies celestial objects (stars,planets, natural and artificial satellites, constellations,comets) in the night sky using a simple telescope and images/ photographs, and explains their role in navigation, calendars, and other phenomena (phases of the moon, eclipse, life on earth)
LEARNING INDICATOR	Identifies different ways to measure different durations of time
QUESTION 22	According to the Gregorian calendar, Diwali will be celebrated in November 2026. In the Indian National Calendar (Saka calendar), Diwali is

	celebrated in the month of Kartika. How many months pass in the Indian National Calendar before Diwali is celebrated?
OPTION A	5 months
OPTION B	6 months
OPTION C	7 months
OPTION D	8 months
CORRECT OPTION	OPTION C

TEACHER NAME	CHANDRESH KUMARI
SCHOOL NAME	KV CUJ RAHYA SUCHANI
GRADE	8
CHAPTER NAME	Chapter 12-How Nature Works in Harmony
CONCEPT	Population and community
GENERAL SCIENCE COMPETENCY	Evaluating and designing scientific enquiry
NCF COMPETENCY	C-3.3 Analyses patterns of relationships between living organisms and their environments in terms of dependence on and response to each other
LEARNING INDICATOR	evaluates the interdependence of organisms within a community and the consequences of disrupting this balance.
QUESTION 23	 Based on the above picture, if a disease causes the population

KVS & SAS

	of Snakes to disappear from this ecosystem, which of the following is most likely to happen next?
OPTION A	The Frog population will decrease because they have nothing to eat.
OPTION B	The Eagle population may decrease because they have lost a food source.
OPTION C	The Berry plant will grow faster because snakes are not eating it.
OPTION D	The Fox will start eating the Eagle.
CORRECT OPTION	OPTION B

TEACHER NAME	CHANDRESH KUMARI
SCHOOL NAME	KV CUJ RAHYA SUCHANI
GRADE	8
CHAPTER NAME	Chapter 8 - Nature of Matter: Elements, Compounds, and Mixture
CONCEPT	Mixtures and its types
GENERAL SCIENCE COMPETENCY	Evaluating and designing scientific enquiry
NCF COMPETENCY	C-1.1 Classifies matter based on observable physical (solid,liquid, gas, shape, volume, density, transparent,opaque, translucent, magnetic, non-magnetic,conducting, non-conducting) and chemical (pure,impure; acid, base; metal, non-metal; element,compound) characteristic
LEARNING INDICATOR	infers the presence of a component in a mixture
QUESTION 24	A student is given a test tube containing a clear, colorless liquid mixture. When they add a small piece of Zinc metal to the liquid, bubbles of an unknown gas start to form. The student collects the gas and brings a burning match near the mouth of the tube, resulting in a loud "pop" sound. Based on this observation, what can you infer is a component of the gas mixture?

OPTION A	Carbon Dioxide
OPTION B	Oxygen
OPTION C	Hydrogen
OPTION D	Nitrogen
CORRECT OPTION	OPTION C

TEACHER NAME	CHANDRESH KUMARI
SCHOOL NAME	KV CUJ RAHYA SUCHANI
GRADE	8
CHAPTER NAME	Chapter 9- The Amazing World of Solutes, Solvents, and Solutions
CONCEPT	Density
GENERAL SCIENCE COMPETENCY	Evaluating and designing scientific enquiry
NCF COMPETENCY	C-1.4 Observes and explains the phenomena caused due to differences in pressure, temperature, and density (e.g., breathing, sinking-floating, water pumps in homes, cooling of things, formation of winds)
LEARNING INDICATOR	predicts floating or sinking of objects of different materials based on graphical/tabular data
QUESTION 25	A scientist is testing a mystery cube in three different liquids. Liquid / Density of Liquid g/cm3 / Observation Cooking Oil / 0.91 / sinks water / 1.00 / sinks Corn syrup / 1.48 / floats What can be inferred about the density of the mystery cube?
OPTION A	It is between 1.00 g/cm3 and 1.48g/cm3.
OPTION B	It is exactly 1.00 g/cm3

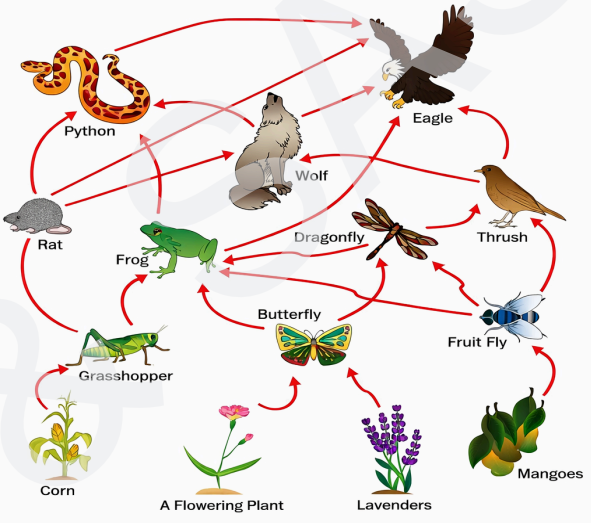
OPTION C	It is greater than 1.48 g/cm3
OPTION D	It is less than 0.91 g/cm3
CORRECT OPTION	OPTION A

TEACHER NAME	SHUBHDA CHAMOLI
SCHOOL NAME	KV RISHIKESH
GRADE	8
CHAPTER NAME	Chapter 9- The Amazing World of Solutes, Solvents, and Solutions
CONCEPT	Solution
GENERAL SCIENCE COMPETENCY	Evaluating and designing scientific enquiry
NCF COMPETENCY	C-1.1 Classifies matter based on observable physical (solid,liquid, gas, shape, volume, density, transparent,opaque, translucent, magnetic, non-magnetic,conducting, non-conducting) and chemical (pure,impure; acid, base; metal, non-metal; element,compound) characteristics
LEARNING INDICATOR	differentiates between saturated and unsaturated solutions in a given context
QUESTION 26	Rahul adds salt to water. At first, it dissolves completely, but after a point, excess salt settles at the bottom despite stirring. What does this show about the two stages of the solution?
OPTION A	First stage: saturated; second stage: unsaturated
OPTION B	First stage: unsaturated; second stage: saturated
OPTION C	First stage: unsaturated; second stage: unsaturated
OPTION D	First stage: saturated; second stage: saturated
CORRECT OPTION	OPTION A

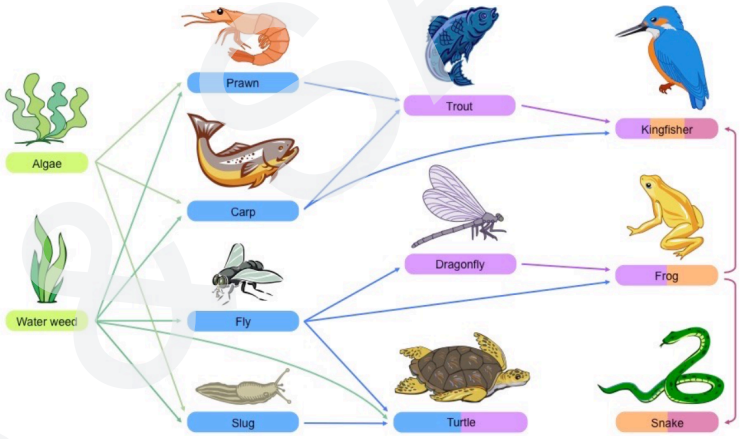
TEACHER NAME	SHUBHDA CHAMOLI

SCHOOL NAME	KV RISHIKESH
GRADE	8
CHAPTER NAME	Chapter 9- The Amazing World of Solutes, Solvents, and Solutions
CONCEPT	Solution
GENERAL SCIENCE COMPETENCY	Evaluating and designing scientific enquiry
NCF COMPETENCY	C-1.1 Classifies matter based on observable physical (solid,liquid, gas, shape, volume, density, transparent,opaque, translucent, magnetic, non-magnetic,conducting, non-conducting) and chemical (pure,impure; acid, base; metal, non-metal; element,compound) characteristics
LEARNING INDICATOR	differentiates between saturated and unsaturated solutions in a given context
QUESTION 27	Rahul adds salt to water. At first, it dissolves completely, but after a point, excess salt settles at the bottom despite stirring. What does this show about the two stages of the solution?
OPTION A	First stage: saturated; second stage: unsaturated
OPTION B	First stage: unsaturated; second stage: saturated
OPTION C	First stage: unsaturated; second stage: unsaturated
OPTION D	First stage: saturated; second stage: saturated
CORRECT OPTION	OPTION A

TEACHER NAME	MANISH KUMAR SAINI
SCHOOL NAME	PM SHRI KV ITARANA,ALWAR
GRADE	8
CHAPTER NAME	Chapter 9- The Amazing World of Solutes, Solvents, and Solutions
CONCEPT	Food chain and Food webs

GENERAL SCIENCE COMPETENCY	Explaining phenomena scientifically
NCF COMPETENCY	C-3.1 Describes the diversity of living things observed in the natural surroundings (insects, earthworms,snails, birds, mammals, reptiles, spiders, diverse plants, and fungi), including at a smaller scale (microscopic organisms)
LEARNING INDICATOR	Identifies the various trophic levels in an ecosystem
QUESTION 28	Observe the given food web.  Which of these organisms represents the second trophic level in the food web?
OPTION A	Frog
OPTION B	Dragonfly
OPTION C	Butterfly
OPTION D	Eagle
CORRECT OPTION	OPTION C

TEACHER NAME	MANISH KUMAR SAINI
SCHOOL NAME	PM SHRI KV ITARANA,ALWAR
GRADE	8
CHAPTER NAME	Chapter 12-How Nature Works in Harmony

CONCEPT	Food chain and Food webs
GENERAL SCIENCE COMPETENCY	Evaluating and designing scientific enquiry
NCF COMPETENCY	C-3.3 Analyses patterns of relationships between living organisms and their environments in terms of dependence on and response to each other
LEARNING INDICATOR	Analyzes the interactions among organisms within a food chain and food web.
QUESTION 29	The food chain of a pond is given below.  What will happen if the number of trout decreases?
OPTION A	Increase in the number of prawns
OPTION B	Increase in the number of dragonfly
OPTION C	Decrease in the number of turtles
OPTION D	Decrease in the number of carps
CORRECT OPTION	OPTION A