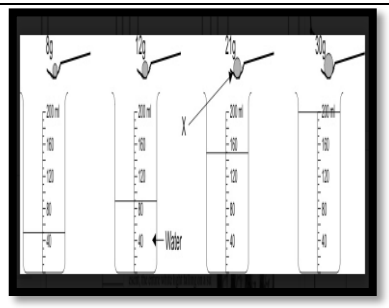
Question Paper

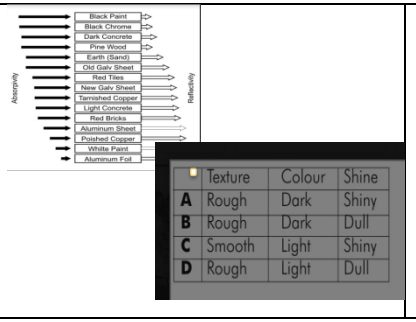
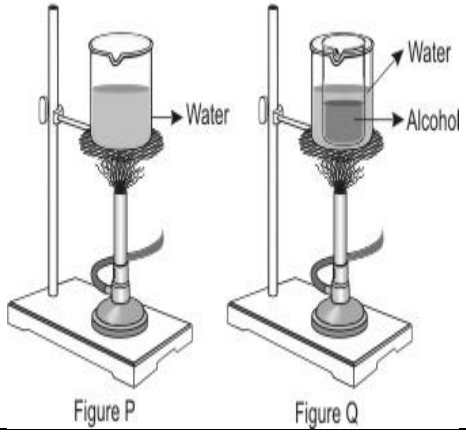
Subject: Science

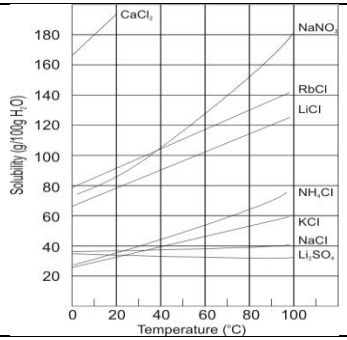
Grade: 9th

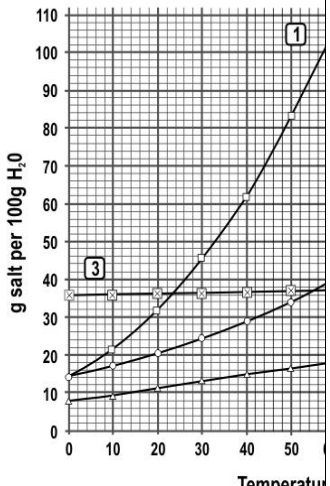
Set-2

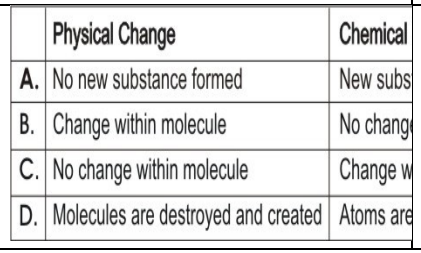
Q.N	Folder name & Question Code	Topic	Question with Answer Option	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	4_23 Science 9127	matter in our surrounding (change in state	In a closed container, 500 g of steam is cooled until all the steam becomes water. The container is then cooled further until all the water becomes ice. Which of the following remains the same during both of these changes?		A
ANSWER OPTION					
		Option A the mass of the water	**Option B** the pressure in the container	**Option C** the temperature of the water	**Option D** the volume of the water

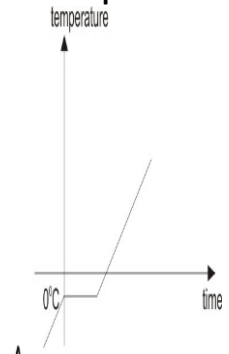
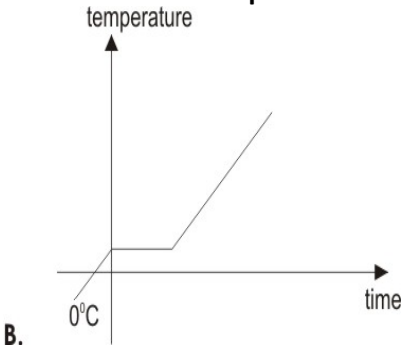
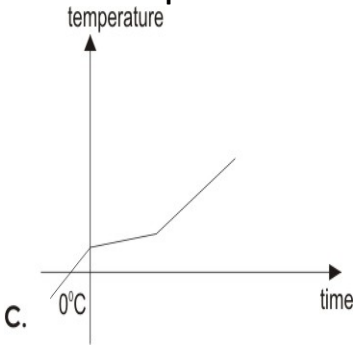
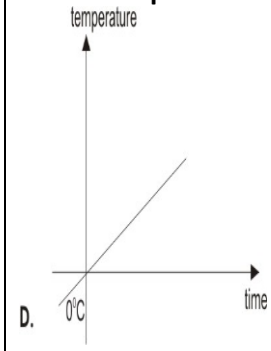
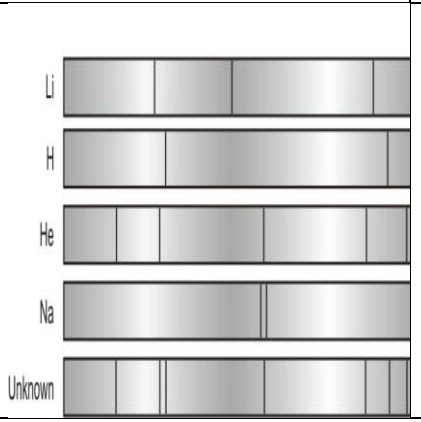
2	**2_9 Science** **6134**	Is Matter Around us Pure?	Matter may be classified as elements, compounds, or mixtures. Which of the following lists includes only mixtures?		**B**
Answer Options					
		Option A dry ice, alcohol, brass	Option B sea water, milk, air	Option C copper, gasoline, bread	Option D paint, blood, mercury
3	**2_9 Science** **6150**	Is Matter Around us Pure?	A maximum of 16.8 g of compound X can be dissolved in 100 ml of water. In an experiment, different masses of X were added to separate beakers containing varying volumes of water as shown.Arrange these solutions in the DESCENDING order of concentrations.		**C**
Answer Options					
		Option A 4-1-2-3	Option B 4-2-1-3	Option C 1-4-3-2	Option D 1-3-2-4

4	**3_16** **2501**	Is Matter Around us Pure?	The texture, colour and shine of four surfaces A, B, C and D are as shown below. Study the diagram given below and identify which surface will absorb the greatest amount of electromagnetic energy from the Sun?	 Texture Colour Shine A Rough Dark Shiny B Rough Dark Dull C Smooth Light Shiny D Rough Light Dull	**B**
Answer Options					
		Option A A	Option B B	Option C C	Option D D
5	4_25 Science 11740	Is matter around us pure?	Figure P below shows a beaker of water being heated directly. However, some liquids like alcohol are heated using a water bath (figure Q). Which of these is NOT likely to be a reason for water baths to be used?		C
Answer Options					

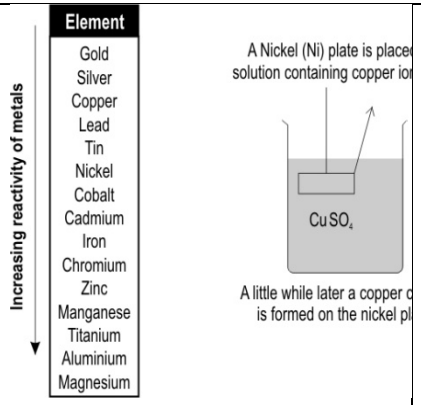
		Option A It is safer to use them with inflammable liquids.	**Option B** It allows more uniform heating of the liquid.	**Option C** It is a faster way of heating a liquid.	**Option D** It is convenient for liquids with low boiling points.
6	**3_15 Science** **3644**	IS MATTER AROUND US PURE	According to the graph, which of these is the least soluble in water at 20˚C.?		**B**
Answer Options					
		Option A $CaCl_2$	Option B KCl	Option C NaCl	Option D $LiSO_4$

7	4_23 Science 9162	IS MATTER AROUND US PURE	Which option correctly matches the data in the table to the graph.	**SALT SOL** Salt name / Formula / Temp. deg C: potassium nitrate KNO_3; potassiu sulphate K_2SO_4 0: 13.9; 7.4 10: 21.2; 9.3 20: 31.6; 11.1 30: 45.3; 13.0 40: 61.4; 14.8 50: 83.5; 16.5 60: 106.0; 18.2 70: 19.8 80: 21.4 90: 22.9 100: 24.1  |	KNO_3 | K_2SO_4 | NaCl | | **A.** | 1 | 4 | 3 | | **B.** | 3 | 1 | 2 | | **C.** | 2 | 4 | 3 | | **D.** | 1 | 3 | 4 |	A
Answer Options					

		Option A A	**Option B** B	**Option C** C	**Option D** D
8	3_17 Science 1838	Is Matter Around Us Pure	Which of these BEST distinguishes a Physical Change, a Chemical Reaction and a Nuclear Reaction?		C
Answer Options					
		Option A A	**Option B** B	**Option C** C	**Option D** D
9	3_17 Science 1844	Is matter Around Us Pure	If a lighted splint is put into a small sample of a gas and a 'pop' sound is heard, the gas is identified as hydrogen. What is the 'pop' sound due to?		C
Answer Options					
		Option A formation of hydrogen molecule	**Option B** formation of oxygen molecule	**Option C** combustion of hydrogen	**Option D** combustion of oxygen

10	3_17 Science 1846	Is Matter Around Us Pure	In cold countries, when snow covers and blocks roads and railway tracks, salt is often put on it. Using that fact, identify the correct graph of ice melting when salt has been put on it:		A
Answer Options					
		Option A 	**Option B** 	**Option C** 	**Option D** 
11	3_17 Science 1858	Is matter Around Us Pure	Each in the periodic table can appear in gaseous form and will produce a series of spectral lines unique to that element. Thus, scientists can identify what elements are in from the lines they find in the star's spectrum. This type of study is called spectroscopy. Below are the spectral lines of four elements and also an unknown gaseous mixture. Identify the elements in the unknown mixture		C

Answer Options					
		Option A Lithium and sodium	**Option B** Lithium and hydrogen	**Option C** Helium and hydrogen	**Option D** Helium and sodium
12	3_17 Science 1859	Is Matter Around Us Pure	400g each of water, oil and sand are taken and heated from room temperature to 70 deg C on identical Bunsen burners. The time taken for each to reach that temperature is noted. Heating is then stopped and the time taken for each to cool to room temperature is noted. Which of these will be true?		A
Answer Options					
		Option A Substances that take more time to get heated will take more time to cool.	**Option B** Substances that take more time to get heated will take less time to cool.	**Option C** There is no connection between the time taken to get heated and to cool.	**Option D** The time taken to get heated depends on the mass, the time taken to cool does not.

<table>
<tr>
<td>13</td>
<td>4_23
Science
9133</td>
<td>Is Matter Around Us Pure (metal and non metal)</td>
<td>The list given here is known as the Electrochemical Series of metals. A metal lower in the list is more reactive, that is, it will form positive ions more easily, and will also displace a metal that is higher from a solution of the latter metal. Which of the following combinations of metal and salt solutions would result in a coating being formed?</td>
<td>


<table>
<tr><th></th><th>Metal plate</th></tr>
<tr><td>A.</td><td>Silver</td></tr>
<tr><td>B.</td><td>Iron</td></tr>
<tr><td>C.</td><td>Tin</td></tr>
<tr><td>D.</td><td>Chromium</td></tr>
</table>
</td>
<td>D</td>
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<tr>
<td colspan="6">Answer Options</td>
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<tr>
<td></td>
<td></td>
<td>Option A
A</td>
<td>Option B
B</td>
<td>Option C
C</td>
<td>Option D
D</td>
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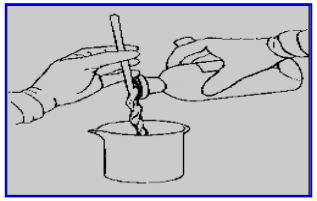
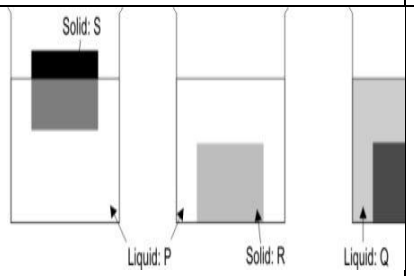
14	**3_15 Science 3662**	Is Matter Around Us Pure?	In a laboratory we often use a stirring rod while pouring liquids to _____.		**C**
Answer Options					
		Option A A	**Option B** B	**Option C** C	**Option D** D
15	**2_9 Science** **5077**	MATTER IN OUR SURROUNDING	Two liquids P and Q, and two solids R and S are shown in different undisturbed arrangements below. Study the arrangements and arrange P, Q, R and S in order of INCREASING density.		**B**
Answer Options					
		Option A P < Q < R < S	Option B Q < S < P < R	Option C Q < P < S < R	Option D S < Q < P < R