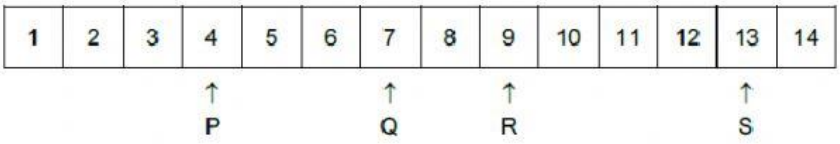
21 The diagram shows the pH values of four solutions.



Which of these solutions are alkaline?

A P only

B P and Q only

C Q, R and S only

D R and S only

Four different solutions are separately tested with blue litmus and with methyl orange. Each solution is known to be either acidic or alkaline. The results are shown.

solution	result with blue litmus	result with methyl orange
1	red	red
2	red	yellow
3	blue	yellow
4	blue	yellow

Which statement is correct?

A Solutions 1 and 4 are acidic.

B Solutions 1 and 2 are alkaline.

C Solutions 3 and 4 are alkaline.

D Solutions 3 and 4 are acidic.

Notes: For the above question you can just use the results from blue litmus paper.

Revision worksheet – Chapter 1, 2, & 3 (Paper 2)

The table shows the pH of four aqueous solutions, W, X, Y and Z.

substance	pH
W	7
X	9
Y	2
Z	5

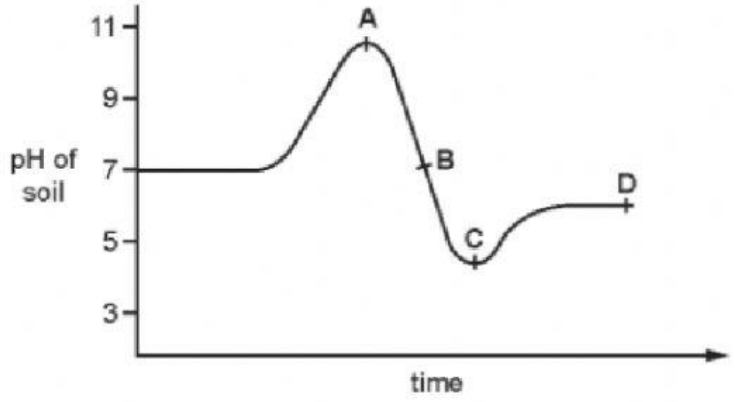
Universal Indicator is added to each solution.

Which row shows the colour of each solution after the indicator is added?

	W	X	Y	Z
A	blue	green	orange	red
B	green	blue	red	orange
C	orange	red	blue	green
D	red	orange	green	blue

The graph shows how the pH of soil in a field changes over time.

At which point was the soil neutral?



Revision worksheet – Chapter 1, 2, & 3 (Paper 2)

Two indicators, bromophenol blue and Congo red, show the following colours in acidic solutions and in alkaline solutions.

indicator	acid	alkali
bromophenol blue	yellow	blue
Congo red	violet	red

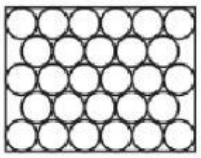
A few drops of each indicator are added to separate samples of a solution of pH 2.

What are the colours of the indicators in this solution?

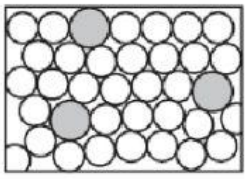
	in a solution of pH 2	
	bromophenol blue is	Congo red is
A	blue	red
B	blue	violet
C	yellow	red
D	yellow	violet

The diagrams show the structure of two substances used to make electrical conductors.

X



Y



Which statement correctly describes X and Y?

A X is a pure metal and Y is a compound.

B X is a pure metal and Y is an alloy.

C X is a solid and Y is a liquid.

D X is harder and stronger than Y.

Why is aluminium used to make containers for storing food?

A It conducts electricity.

B It has a high melting point.

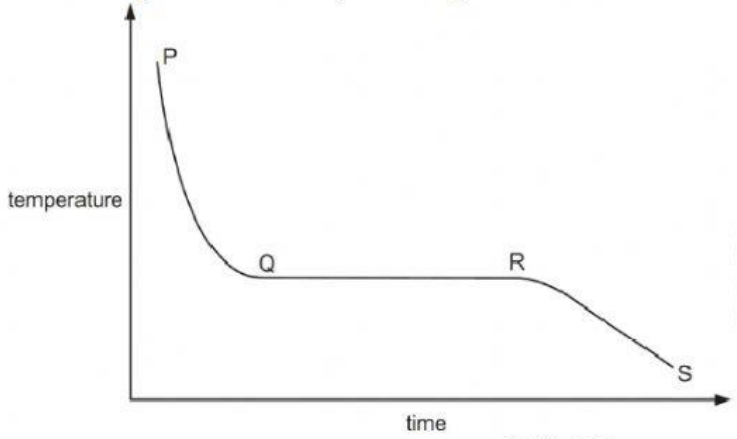
C It is resistant to corrosion.

D It is strong.

M/J 05/P1/Q3

A sample of a pure compound is heated until it is completely molten and the compound is then allowed to cool until it is completely solid again.

The graph shows how the temperature of the compound changes with time.



When are liquid and solid both present?

A P to Q and R to S

B P to Q

C Q to R

D R to S

O/N 04/P1/Q3

A liquid boils at a temperature of 100 °C.

Which other property of the liquid proves that it is pure water?

A It does not leave a residue when boiled.

B It freezes at 0 °C.

C It is neither acidic nor alkaline.

D It turns white anhydrous copper(II) sulphate blue.