

Commentary on candidate evidence

Assessors awarded the candidate evidence contained in this pack the following marks for questions 6 and 12 of the 2026 National 5 question paper, section 2.

Question 6

Candidate 1

The candidate was awarded **1 mark** because they have demonstrated a limited understanding of the chemistry involved.

The candidate has given details about the location, charge and mass of electrons. The description of conduction of electricity is not linked to metallic bonding.

Candidate 2

The candidate was awarded **2 marks** because they have demonstrated a reasonable understanding of the chemistry involved.

The candidate refers to gaining and losing electrons to achieve a full outer shell, and stability as well as the formation of ions. They also correctly link the charge of the resulting ion to the gaining and losing of electrons. They link delocalised electrons to metallic bonding and to the ability to conduct electricity.

Candidate 3

The candidate was awarded **2 marks** because they have demonstrated a reasonable understanding of the chemistry involved.

The candidate gives a good description of outer electrons and their link to stability with an example given. Links are made to gaining and losing electrons, the charge of the resultant ions and the group in the periodic table. Ion-electron equations are given, and links are made to covalent bonding, with a diagram provided. Some of the explanations contain small errors.

Candidate 4

The candidate was awarded **1 mark** because they have demonstrated a limited understanding of the chemistry involved.

The candidate has linked electrons to valency, beta radiation and the charge of ions.

Candidate 5

The candidate was awarded **1 mark** because they have demonstrated a limited understanding of the chemistry involved.

The candidate has linked electrons to bonding, beta radiation and has given the mass and charge. There are errors in the descriptions of the bonding which prevent this answer from being awarded 2 marks.

Candidate 6

The candidate was awarded **3 marks** because they have demonstrated a good understanding of the chemistry involved.

The candidate has given the charge and location of electrons. They have explained the link between electrons and chemical reactivity and given examples linked to groups in the periodic table. They have explained how ions are formed including examples of both a positive and a negative ion. They have also explained the role of electrons in the conductivity of electricity in metals and graphite.

Candidate 7

The candidate was awarded **3 marks** because they have demonstrated a good understanding of the chemistry involved.

The candidate has given the mass, charge and nuclide notation of electrons. They have explained the link between electrons and reduction reactions and have given a description of this in the context of electrolysis. They have also given a correctly written ion electron equation for a reduction reaction. They have explained how negative ions are formed including an explanation of why they are negative. They

have provided a link to covalent bonding including a good definition and diagram, before linking electrons to reactivity and stability with examples.

Candidate 8

The candidate was awarded **1 mark** because they have demonstrated a limited understanding of the chemistry involved.

The candidate has given details of the charge and location of electrons in an atom. They have linked electrons to the group in the periodic table and reactivity without providing any examples.

Question 12

Candidate 1

The candidate was awarded **1 mark** because they have demonstrated a limited understanding of the chemistry involved.

The candidate has identified the bonding of sodium chloride and linked this to the types of elements. They have identified that it can conduct electricity as a solution.

Candidate 2

The candidate was awarded **1 mark** because they have demonstrated a limited understanding of the chemistry involved.

The candidate has described the formation of sodium chloride and given the type of bonding with links to some properties.

Candidate 3

The candidate was awarded **1 mark** because they have demonstrated a limited understanding of the chemistry involved.

The candidate has given some properties from the data booklet and given the ionic formula.

Candidate 4

The candidate was awarded **1 mark** because they have demonstrated a limited understanding of the chemistry involved.

The candidate has described the formation of sodium chloride.

Candidate 5

The candidate was awarded **2 marks** because they have demonstrated a reasonable understanding of the chemistry involved.

The candidate has described the formation of sodium chloride with three correct word equations. They have described the bonding in sodium chloride and linked this to conduction of electricity.

Candidate 6

The candidate was awarded **2 marks** because they have demonstrated a reasonable understanding of the chemistry involved.

The candidate has described the formation of sodium chloride. They have described the bonding in sodium chloride and linked this to conduction of electricity. They have given the ionic equation and several pieces of data from the data booklet.

Candidate 7

The candidate was awarded **2 marks** because they have demonstrated a reasonable understanding of the chemistry involved.

The candidate has described the formation of sodium chloride in neutralisation reactions with general word equations and the fact that water is always produced. They have described the bonding in sodium chloride including a good definition of ionic bonding. They have linked bonding to conduction of electricity but have made several errors in doing so. They have given some information about sodium and chlorine which are not relevant to the chemistry of sodium chloride.

Candidate 8

The candidate was awarded **1 mark** because they have demonstrated a limited understanding of the chemistry involved.

The candidate has described the formation of sodium chloride in reactions with general word equations.