



1.8 — Categorisation of Ferrous and Non-Ferrous Metals

Pearson Edexcel GCSE (9–1) Design and Technology

Answer Sheet — Name Questions

Qualification: Pearson Edexcel GCSE (9–1) Design and Technology

Chapter: 1.8

Answers

Correct answers are shown with a tick (✓). Spelling and case are not important — award the mark for similar words.

Q1

Name the property of cast iron that allows it to operate without additional lubrication.

Answer : **Self-lubricating** ✓

Spelling and case are not important — similar words are acceptable.

Source: Specific Ferrous Metals — Cast Iron: Cast Iron is self-lubricating.

Q2

Identify the ferrous metal that is an alloy of carbon steel, chromium, nickel, and manganese.

Answer : **Stainless steel** ✓

Spelling and case are not important — similar words are acceptable.

Source: Specific Ferrous Metals — Stainless Steel: Stainless Steel is an alloy of carbon steel, chromium, nickel, and manganese.

Q3

What is the term for the property that describes a material's ability to resist deformation, indentation, or scratching?

Answer : **Hardness** ✓

Spelling and case are not important — similar words are acceptable.

Source: Key Terms — Hardness: The ability of a material to resist deformation, indentation, penetration, or scratching.

Q4

What is the term for the property that describes a material's ability to be drawn into a wire without breaking?

Answer : **Ductility** ✓

Spelling and case are not important — similar words are acceptable.

Source: 1.8.3 Properties — Ductility: The ability of a material to deform by stretching or drawing into a wire without breaking.

Q5

Identify the working property that describes a permanent change where a metal stays in a new shape after force is applied.

Answer : **Plastic deformation** ✓

Spelling and case are not important — similar words are acceptable.

Source: Working Properties — Plastic Deformation: A permanent change where the metal stays in a new shape after being deformed.