

Name:	Class:	Date given:
		Date due in:

# Metals and Non-Metals

1. Shade in the area on the periodic table below to show which elements are metals. [1]
2. In a different colour, shade in the area on the periodic table below to show which elements are non-metals. [1]

																He helium		
Li lithium	Be beryllium											H hydrogen	B boron	C carbon	N nitrogen	O oxygen	F fluorine	Ne neon
Na sodium	Mg magnesium											Al aluminium	Si silicon	P phosphorous	S sulfur	Cl chlorine	Ar argon	
K potassium	Ca calcium	Sc scandium	Ti titanium	V vanadium	Cr chromium	Mn manganese	Fe iron	Co cobalt	Ni nickel	Cu copper	Zn zinc	Ga gallium	Ge germanium	As arsenic	Se selenium	Br bromine	Kr krypton	
Rb rubidium	Sr strontium	Y yttrium	Zr zirconium	Nb niobium	Mo molybdenum	Tc technetium	Ru ruthenium	Rh rhodium	Pd palladium	Ag silver	Cd cadmium	In indium	Sn tin	Sb antimony	Te tellurium	I iodine	Xe xenon	
Cs caesium	Ba barium	La lanthanum	Hf hafnium	Ta tantalum	W tungsten	Re rhenium	Os osmium	Ir iridium	Pt platinum	Au gold	Hg mercury	Tl thallium	Pb lead	Bi bismuth	Po polonium	At astatine	Rn radon	
Fr francium	Ra radium	Ac actinium	Rf rutherfordium	Db dubnium	Sg seaborgium	Bh bohrium	Hs hassium	Mt meitnerium	Ds darmstadtium	Rg roentgenium								

3. Cross out one of the options (shown in bold and brackets), so that each sentence reads with the correct answer. [15]
- Metals (can / cannot) usually conduct electricity.
  - Non-metals (can / cannot) usually conduct electricity.
  - Metals are good (conductors / insulators) of heat energy.
  - Non-metals are good (conductors / insulators) of heat energy.
  - Metals are (dull / shiny) when polished or freshly cut.
  - Metals are (brittle / malleable).
  - Metals have (high / low) melting and boiling points.
  - Non-metals have (high / low) melting and boiling points.
  - Metals have a (high / low) tensile strength.
  - Non-metal particles are held by (strong / weak) forces.
  - Metals have a (high / low) density.
  - Non-metals have a (high / low) density.
  - Metals (can / cannot) be drawn into wires.
  - (Steel / Aluminium) is an example of a metal alloy.
  - (Nickel / Gold) is an example of a magnetic metal.

**Learning Outcomes** (tick if achieved)

Q1	I can identify metals on the periodic table	
Q2	I can identify non-metals on the periodic table	
Q3	I can describe properties of metals and non-metals	

# Metals and Non-Metals Answers

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- In a different colour, shade in the area on the periodic table below to show which elements are non-metals. [1]

																He helium					
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- Metals (**can** / ~~cannot~~) usually conduct electricity.
- Non-metals (~~can~~ / **cannot**) usually conduct electricity.
- Metals are good (**conductors** / ~~insulators~~) of heat energy.
- Non-metals are good (~~conductors~~ / **insulators**) of heat energy.
- Metals are (~~dull~~ / **shiny**) when polished or freshly cut.
- Metals are (~~brittle~~ / **malleable**).
- Metals have (**high** / ~~low~~) melting and boiling points.
- Non-metals have (~~high~~ / **low**) melting and boiling points.
- Metals have a (**high** / ~~low~~) tensile strength.
- Non-metal particles are held by (~~strong~~ / **weak**) forces.
- Metals have a (**high** / ~~low~~) density.
- Non-metals have a (~~high~~ / **low**) density.
- Metals (**can** / ~~cannot~~) be drawn into wires.
- (**Steel** / ~~Aluminium~~) is an example of a metal alloy.
- (**Nickel** / ~~Gold~~) is an example of a magnetic metal.