

4 Which row describes elements, compounds and mixtures?

	elements	compounds	mixtures
A	all the atoms are the same type	contain different atoms chemically joined together	can be separated using physical processes
B	all the atoms are the same type	can be separated into new substances using chemical processes	contain different atoms chemically joined together
C	can be separated into new substances using chemical processes	all the atoms are the same type	contain different atoms chemically joined together
D	contain different atoms chemically joined together	all the atoms are the same type	can be separated using physical processes

1 A list of substances is shown.

bauxite calcium oxide ethanol graphite methane
nitrogen oxygen propane propene sulfur dioxide

Answer the questions using the list of substances.

Each substance may be used once, more than once, or not at all.

State which of the substances:

- (a) is a basic oxide
..... [1]
- (b) contains carbon atoms only
..... [1]
- (c) is manufactured by fermentation
..... [1]
- (d) is produced by the decomposition of vegetation
..... [1]
- (e) contains aluminium oxide
..... [1]
- (f) causes acid rain
..... [1]
- (g) is a simple molecule with 11 atoms
..... [1]
- (h) is produced when limestone thermally decomposes in the blast furnace
..... [1]
- (i) is a gas that is approximately 21% of clean, dry air
..... [1]
- (j) is a monomer in addition polymerisation.
..... [1]

[Total: 10]