

1 A list of substances is shown.

aluminium oxide

calcium oxide

chlorine

ethanol

graphite

nitrogen

oxygen

propane

propene

silicon(IV) oxide

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 compound with a giant covalent structure

..... [1]

(b) is an unsaturated hydrocarbon

..... [1]

(c) is an amphoteric oxide

..... [1]

(d) is a good conductor of electricity when solid

..... [1]

(e) contains simple molecules with 9 atoms

..... [1]

(f) react together to form slag in the blast furnace

..... and [2]

(g) belongs to a homologous series whose general formula is C_nH_{2n+2}

..... [1]

(h) is manufactured by the catalytic addition of steam to ethene

..... [1]

(i) is a gas that is approximately 78% of clean, dry air.

..... [1]

[Total: 10]