

Questions of the Day Set #7

#74

What is the percent of chromium by mass in

$\text{Na}_2\text{Cr}_2\text{O}_7$?

(A) 39.7% (B) 42.7% (C) 19.8% (D) 17.6%

#76

Given the unbalanced equation:



How many grams of water can be produced by the complete reaction of 45.0 grams of propane (C_3H_8)?

(A) 4.60 g (B) 18.4 g (C) 73.6 g (D) 180. g

#78

Given the reaction: $_ \text{Al} (\text{s}) + _ \text{O}_2 (\text{g}) \Rightarrow _ \text{Al}_2\text{O}_3 (\text{s})$

What is the minimum number of grams of oxygen gas required to produce 1.25 moles of aluminum oxide?

(A) 48.0 g (B) 60.0 g
(C) 32.0 g (D) 0.376 g

#80

80
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Which substance can be decomposed by a chemical change?

(A) beryllium (B) boron
(C) methane (D) magnesium

#82

Which statement correctly compares an atom of boron-11 and an atom of carbon-14?

Boron-11 has one fewer ___ and ___ fewer ___ than carbon-14.

(A) proton; two; neutrons

(B) neutron; two; protons

(C) proton; three; neutrons

(D) neutron; three; protons

#84

An atom with the electron configuration of $1s^2 2s^2 2p^6 3s^2$ would most likely ___ in size as it forms a ___ ion.

(A) decrease; negative

(B) decrease; positive

(C) increase; negative

(D) increase; positive