Universidad Carlos III de Madrid

SELF ASSESSMENT TEST TOPIC 01

	A) 6 B) 5 C) 4 D) 3
2.	How many significant figures are there in the volume 0.0120 L? A) 5 B) 4 C) 3 D) 2
3.	Aluminum has a density of 2.7 g/cm ³ . Calculate the volume occupied by a mass of 5.235 g? A) 1.9 cm ³ B) 0.5 cm ³ C) 1.0 m ³ D) 1.9 m ³
4.	According to the American Heart Association, the recommended daily allowance (RDA) of sodium should not exceed the 3000 mg limit. If table salt (sodium chloride) is 42.7% sodium. How many grams of salt are needed to provide the RDA of sodium? A) 1281 mg B) 1281 g C) 7025 g D) 7.02 g
5.	Calculate the percentage composition (by weight) of each element present in sodium sulfate (Na ₂ SO ₄): A) %Na: 32.37; %S: 22.57; %O 45.06 B) %Na: 22.57; %S: 32.37; %O 45.06 C) %Na: 45.06; %S: 22.57; %O 32.37 D) %Na: 32.37; %S: 45.06; %O 22.57
6.	Convert 300 °C to the Kelvin scale: A) 573.15 K B) 26.85 K C) 1.09 K D) 0.911 K
7.	Calculate the amount of nitrogen expressed as percentage by weight present in ammonium phosphate [(NH ₄) ₃ PO ₄]: A) %N: 8.11 B) %N: 20.77 C) %N: 28.19 D) %N: 42.90
8.	Which of the following properties is an example of a chemical property? A) Combustibility B) Boiling temperature C) Colour D) freezing point

1. How many significant figures are there in the measurement 1.3240 g?