

Dear Student 1 Test

For the ACAIS paper you have just completed you have correctly answered 20 questions out of 50.

A detailed summary of your performance is given below. It will show you areas where you have done well and other areas you may need to revise.

Question	Descriptor	Content	Result
1	Determine atomic number from nuclear structure	AS	Incorrect
2	Identify chemical species from atomic structure	AS	Correct
3	Identify ion from atomic structure	AS	Incorrect
4	Determine mass number from nuclear notation	AS	Correct
5	Define isotopes in reference to nuclear properties	AS	Incorrect
6	Determine electron structure from atomic number	AS	Incorrect
7	Identify electron configuration using sub-shell notation	AS	Incorrect
8	Describe atomic structure of an ion from nuclear notation	AS	Incorrect
9	Classify elements and compounds	ECB	Incorrect
10	Define mixtures in terms of particles	ECB	Correct
11	Identify bond type in a molecular solid	ECB	Correct
12	Determine a compound's electron dot (Lewis) diagram	ECB	Correct
13	Describe structure of solid metals	ECB	Correct
14	Explain structure of solid water	ECB	Incorrect
15	Describe arrangement of water molecules in a solution	ECB	Correct
16	Identify forces involved in physical and chemical transformations	ECB	Incorrect
17	Explain structure of a molecular solid	ECB	Incorrect
18	Explain boiling point trends	ECB	Incorrect
19	Explain molecular formula	MMF	Correct
20	Determine empirical formula from stoichiometric calculation	MMF	Correct
21	Convert number of atoms to moles	MMF	Incorrect
22	Determine number of moles of atoms in a molecule	MMF	Incorrect
23	Calculate mass from number of moles and molecular mass	MMF	Correct
24	Calculate relative atomic mass	MMF	Correct
25	Determine mass number from isotopic composition	MMF	Correct
26	Calculate mass of product using stoichiometry	MMF	Incorrect
27	Calculate moles of product using stoichiometry	MMF	Correct
28	Identify chemical species present after dissolution	CS	Correct
29	Determine reactions of ionic and molecular compounds with water	CS	Incorrect
30	Calculate amount of solvent required for dissolution	CS	Correct
31	Determine reaction type	CS	Incorrect
32	Calculate solubility of ionic compound	CS	Correct
33	Determine relative polarity of compounds	CS	Incorrect
34	Identify interactions of polar molecules with water	CS	Incorrect
35	Determine oxidation number of atoms in a compound	CS	Correct
36	Identify oxidant and reductant in a redox reaction	CS	Incorrect
37	Balance a redox reaction	CS	Correct
38	Determine hydrogen ion concentration from pH	CS	Incorrect
39	Calculate pH after dilution	CS	Incorrect
40	Identify conjugate base of an acid	CS	Correct
41	Identify acids and bases in reactions	CS	Incorrect
42	Describe molar volume of ideal gases	SCGL	Incorrect
43	Determine effect on gases of changing standard conditions	SCGL	Incorrect
44	Apply gas laws	SCGL	Incorrect
45	Identify assumptions of ideal gases	SCGL	Incorrect
46	Identify general formula of an homologous series	SOC	Incorrect
47	Recognise formula of an organic compound	SOC	Correct
48	Name organic compound from molecular formula	SOC	Incorrect
49	Identify trends in properties of polymers	SOC	Incorrect
50	Identify monomer from polymer structure	SOC	Incorrect

#### Breakdown by Content

	Atomic Structure (AS)	Elements Compounds and Bonding (ECB)	Mole and Molecular Formula (MMF)	Chemistry of Solutions (CS)	Standard Conditions and Gas Laws (SCGL)	Simple Organic Chemistry (SOC)	Total	Total %
Total	2	5	6	6	0	1	20	40