Revision Checklist: GCSE AQA Chemistry (Higher Tier)

1	2	3	4	5

No understanding — Exam-ready

	1. ATOMIC STRUCTURE & THE PERIODIC TABLE	Rate topics 1 to 5
a.	Elements, compounds & mixtures	
b.	Separating mixtures	
c.	Development of atomic model	
d.	Mass & atomic number	
e.	Relative atomic mass	
f.	Electronic structure	
g.	Groups & periods	
h.	Development of periodic table	
i.	Metals & non-metals	
j.	Group 0 elements	
k.	Group 1 elements	
l.	Group 7 elements	
m.	Transition metals	

	2. BONDING, STRUCTURE, & THE PROPERTIES OF MATTER	Rate topics 1 to 5
a.	Ionic bonding	
b.	Covalent bonding	
c.	Dot & cross diagrams	
d.	Metallic bonding	
e.	States of matter	
f.	Properties of ionic compounds	
g.	Properties of small molecules	
h.	Polymers & giant covalent structures	
i.	Properties of metals	
j.	Alloys	
k.	Diamond & graphite	
l.	Graphene & fullerenes	
m.	Nanoparticles	

	3. QUANTITATIVE CHEMISTRY	Rate topics 1 to 5
a.	Balancing chemical equations	
b.	Conservation of mass	
c.	Relative formula mass	
d.	Estimating uncertainty	
e.	Moles	
f.	Using moles to calculate masses	
g.	Using moles to balance equations	
h.	Limiting reactants	
i.	Concentration	
j.	Percentage yield	
k.	Atom economy	
l.	Moles & volumes of gases	

	4. CHEMICAL CHANGES	Rate topics 1 to 5
a.	The reactivity series	
b.	Reduction & oxidation	
c.	Extracting metals by reduction	
d.	Ionic & half equations	
e.	Reacting acids with metals	
f.	Neutralisation of acids & naming salts	
g.	pH	
h.	Titrations	
i.	Strong & weak acids	
j.	Electrolysis of molten ionic compounds	
k.	Electrolysis of aqueous solutions	

	5. ENERGY CHANGES	Rate topics 1 to 5
a.	Exothermic & endothermic reactions	
b.	Reaction profiles	
c.	Calculating energy change of reactions	
d.	Cells & batteries	
e.	Hydrogen fuel cell	

PRACTICALS	Rate topics 1 to 5
RP 1: "Prepare a pure, dry sample of a soluble salt from an insoluble oxide or carbonate."	
RP 2: "Determine the concentration of one of the solutions when reacting a strong acid and a strong alkali by titration (when the concentration of the other solution is known)."	
RP 3: "Investigate the electrolysis of aqueous solutions (a hypothesis must be formed and developed)."	