

Chemistry: Foundation Revision list

Paper 1

Topic	Tick
Chapter 1:	
Describe the structure of the atom https://www.youtube.com/watch?v=5lmrQKISgHU	
Define the terms element, compound and mixture https://www.youtube.com/watch?v=DZ6Ap8Zyb9w	
Describe how different mixtures can be separated - filtration, crystallisation, simple distillation, fractional distillation and chromatography https://www.youtube.com/watch?v=YrTmemuBxg4	
History of the atom https://www.youtube.com/watch?v=7MUA_yL5GDo	
The position of elements in the Periodic Table in terms of atomic number and arrangements of electrons https://www.youtube.com/watch?v=IdS9roW7IzM	
History of the Periodic Table https://www.youtube.com/watch?v=uwzXfZoCP_k	
Metals and non metals (including properties, atomic structure, reactions) https://www.youtube.com/watch?v=Rc2JBp91V7o	
Group 0 - name, properties and reactivity in terms of electron structure https://www.youtube.com/watch?v=VhiieTJWYHs	
Group 1 - name, properties and reactivity in terms of electron structure https://www.youtube.com/watch?v=dZGDUKQa_6g	
Group 7 - name, displacement reactions, properties and reactivity in terms of electron structure https://www.youtube.com/watch?v=yW_C10cEzMk	
Transition elements - describe their properties and compare with Group 1 properties https://www.youtube.com/watch?v=m0Uj7mSC6HU	
Chapter 2:	
Describe ionic bonding https://www.youtube.com/watch?v=6DtrrWA5nKE	
Draw dot and cross diagrams for ionic bonding https://www.youtube.com/watch?v=gbx1pcFn4ws	
Explain the pros and cons of models of bonding https://www.youtube.com/watch?v=0khrZnI9ClQ	
Describe covalent bonding https://www.youtube.com/watch?v=5I_1jRGSr9E	

Draw dot and cross diagrams for covalent bonding https://www.youtube.com/watch?v=KV2KxBxmOKA	
Describe metallic bonding https://www.youtube.com/watch?v=b1y2Q6YX1bQ	
Particle diagrams with descriptions https://www.youtube.com/watch?v=OTksau0_VoI	
Predict the state of substances at different temperatures given data https://www.youtube.com/watch?v=h7ErVAZbeu0	
Know the state symbols	
Describe the properties of ionic compounds https://www.youtube.com/watch?v=AGD5pIXXt4o	
Describe the properties of simple covalent molecules https://www.youtube.com/watch?v=DECGNyC-x_s	
Describe the properties of polymers https://www.youtube.com/watch?v=EPOzfm_FVqc	
Recognise polymers from their diagrams	
Describe what a nanoparticle is and uses https://www.youtube.com/watch?v=70dOzvhn-8M	
Explain advantages and disadvantages of nanotechnology	
Chapter 4:	
Neutralisation reactions https://www.youtube.com/watch?v=IBjwMcHUyBY	
Naming salts https://www.youtube.com/watch?v=WnAKhtnJjz0	
State the pH scale with numbers and colours https://www.youtube.com/watch?v=ckbsHM2igT0	
RPA making salts https://www.youtube.com/watch?v=9GH95172Js8	
RPA titration https://www.youtube.com/watch?v=vn3Rx3g1VPk	
Chapter 5:	
Define exothermic and endothermic reactions with examples https://www.youtube.com/watch?v=dstRL5xBOSk	
Label energy profiles for exothermic and endothermic reactions	
RPA temperature changes https://www.youtube.com/watch?v=tKxcQYZ2YH8	

Chemistry Paper 2

Topic	Tick
Chapter 6	
State the factors that affect the rate of the reaction https://www.youtube.com/watch?v=SPXanyy3-hU	
Explain how concentration affects the rate of reaction using the collision theory https://www.youtube.com/watch?v=u4Co4N-Jmbs	
RPA concentration affect the rate of reaction https://www.youtube.com/watch?v=N5p06i9ilmo	
Explain how temperature affects the rate of reaction using the collision theory https://www.youtube.com/watch?v=G2TEfhwgq84	
Explain how surface area affects the rate of reaction using the collision theory https://www.youtube.com/watch?v=WojotwxPD6I	
Describe how a catalyst affects the rate of reaction https://www.youtube.com/watch?v=m_9bpZep1QM	
Describe what a reversible reaction is https://www.youtube.com/watch?v=ty9TczsW5ew	
State what equilibrium is	
Chapter 7	
Describe the formation of crude oil https://www.youtube.com/watch?v=wfSvbLQNwFc	
State the general formula for alkanes https://www.youtube.com/watch?v=ykIFTtTjoso	
Draw, name and write the formula of the first 4 alkanes	
Describe the process of fractional distillation https://www.youtube.com/watch?v=CjmriZq5xRo	
Describe the trend in boiling points of hydrocarbons https://www.youtube.com/watch?v=4EAh9E2KhOE	
Describe the trend in viscosity of hydrocarbons	
Describe the trend in flammability of hydrocarbons	
Write word and symbol equations for complete combustion https://www.youtube.com/watch?v=cRnpKjHpFyg	
Write word and symbol equations for incomplete combustion	
Describe the process of cracking https://www.youtube.com/watch?v=7AWwjKbRa_o	
Describe the purpose of cracking	
Describe the test for alkenes https://www.youtube.com/watch?v=qEm-CaqhcOs	

Chapter 8	
RPA chromatography https://www.youtube.com/watch?v=P8i4QYncQxI	
Describe the method of flame tests and results	
Describe the sodium hydroxide test with results	
Describe how to test for carbonates with results	
Describe how to test for halides with results	
Describe how to test for sulfates with results	
RPA ion tests https://www.youtube.com/watch?v=4iZRs4XIJOE	
Describe the advantages of instrumental methods https://www.youtube.com/watch?v=2DxD0hTiFWg	
Describe the use and results of flame emission spectroscopy https://www.youtube.com/watch?v=1BCc_RrrSSw	
Chapter 9	
State the proportion of gases in the Earth's atmosphere https://www.youtube.com/watch?v=1Oh_-3MOPso	
Describe the formation of the Earth's atmosphere	
Chemistry Chapter 10	
State examples of natural resources https://www.youtube.com/watch?v=1UQnUQR0tTo	
Distinguish between finite and renewable resources	
Describe the process of making potable water from fresh water https://www.youtube.com/watch?v=PDeiRIQvWnM	
Describe the process of desalination of salty water	
Describe the process of sewage treatment https://www.youtube.com/watch?v=n7pYRQs20bI	
RPA Water purification https://www.youtube.com/watch?v=DikcEq2wg8g	
Life cycle assessments https://www.youtube.com/watch?v=ScY_Yb1V8AY	
Describe the 3R'S - Reduce, Reuse and Recycle - process, advantages and disadvantages https://www.youtube.com/watch?v=obb-ZHqBw10	
Describe the Haber Process https://www.youtube.com/watch?v=1_HoWz5Kxfk	
Describe how NPK fertilisers are produced and used https://www.youtube.com/watch?v=rKzt9BvvEeQ	