

AQA GCSE Combined Science Trilogy: Foundation

Advance Information of Assessed Content 2022

Link to specification: <https://filestore.aqa.org.uk/resources/science/specifications/AQA-8464-SP-2016.PDF>

Link to advance information document: <https://filestore.aqa.org.uk/content/summer-2022/AQA-8464-AI-22.PDF>

Link to revised Physics equation sheet: <https://filestore.aqa.org.uk/resources/science/AQA-8464-8465-ES-INS.PDF>

AQA GCSE Combined Science:
Foundation Tier
Paper 1
(biology, chemistry, physics)

These specification points will be the **major focus** of this paper.

All other specification points from B1, other those on these pages that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
4.1.2 Cell Division	<ul style="list-style-type: none"> How DNA is arranged as chromosomes Series of stages in the cell cycles inc. mitosis Definition and uses of stem cells 	https://www.bbc.co.uk/bitesize/guides/z2kmk2p/revision/2 https://www.bbc.co.uk/bitesize/guides/z2kmk2p/revision/3	https://www.youtube.com/watch?v=RHvZVmbiA78 https://www.youtube.com/watch?v=Kh27ejxvYM&t=24s
Required practical 1: use of light microscope	<ul style="list-style-type: none"> How to prepare slides How to use the microscope to improve field of view, clarify, change magnification Microscopy calculations <p><i>Linked learning: identifying prokaryotic and eukaryotic cell structures from microscope images; identifying specialised cells from microscope images; diffusion of substances in and out of cells</i></p>	https://www.bbc.co.uk/bitesize/guides/zpqgqhv/revision/1 Eukaryotes and prokaryotes - Cell structure - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize Diffusion - Transport in cells - AQA - GCSE Biology (Single Science) Revision - AQA - BBC Bitesize	https://www.youtube.com/watch?v=iBVxo5T-ZQM&t=8s GCSE Science Revision Biology "Eukaryotes and Prokaryotes" - YouTube GCSE Science Revision Biology "Diffusion" - YouTube
4.2.2 Animal tissues, organs and organ systems	<ul style="list-style-type: none"> Functions of tissues and organs in the digestive system Digestive enzymes Functions of tissues and organs in the circulatory system Pathway of blood through the heart adaptations of components of the blood Risk factors of non-communicable diseases 	https://www.bbc.co.uk/bitesize/guides/z89mk2p/revision/1 https://www.bbc.co.uk/bitesize/guides/zsnscrd/revision/1	https://www.youtube.com/watch?v=4ui4oSHHzA https://www.youtube.com/watch?v=VLK2wANjQm0 https://www.youtube.com/watch?v=bpYaKM2hVFY
Required practical 3: test for carbohydrates, lipids and proteins	<ul style="list-style-type: none"> Reagent and positive result for carbohydrates, proteins and lipids 	https://www.bbc.co.uk/bitesize/guides/z89mk2p/revision/3	https://www.youtube.com/watch?v=SqWTJWOBww4

These specification points will be the **major focus** of this paper.

Exam date: 17th May

All other specification points from B1, other those on these pages that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
4.3.1 Communicable Diseases	<ul style="list-style-type: none"> Definition and examples of pathogen Describe how viruses and bacteria make us ill; state examples of diseases caused by each type of pathogen Human defence mechanisms including response to vaccines Comparing antibody production after active and passive immunity Describe the role of antibiotics Describe the stages in the development of drugs 	https://www.bbc.co.uk/bitesize/topics/z9kww6f	https://www.youtube.com/watch?v=dbd5iydu3EY https://www.youtube.com/watch?v=5X9MklLVhlw https://www.youtube.com/watch?v=HSrrPdJDqxM https://www.youtube.com/watch?v=uPeZBhJYInU https://www.youtube.com/watch?v=w3ykU52K-Hw
4.4.1 Photosynthesis	<ul style="list-style-type: none"> Photosynthesis equation Factors affecting rate of photosynthesis 	https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/1	https://www.youtube.com/watch?v=rAJGnS_ktk4
Required Practical 5: effect of light intensity on rate of photosynthesis	<ul style="list-style-type: none"> Identify independent, dependent, control variables Describe how to measure the dependent variable Describe a method Analysing results 	https://www.bbc.co.uk/bitesize/guides/zs4mk2p/revision/5	https://www.youtube.com/watch?v=cBCKedXdFeE

These specification points will **not be assessed** on this paper.

Spec point <u>NOT</u> assessed
4.1.3.2 Osmosis
4.1.3.3 Active Transport
4.2.2.4 Coronary Heart Diseases
4.4.1.3 Uses of Glucose from Photosynthesis
4.4.2 Respiration

These specification points will be the **major focus** of this paper.

Exam date: 27th May

All other specification points from C1, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
5.1.2 The Periodic Table	<ul style="list-style-type: none"> The Periodic Table is arranged in order of proton number What atoms of elements in the same group have in common What atoms of elements in the same period have in common Development in the Periodic Table -Ions formed from metals and non-metals Trends in physical and chemical properties of group 1,7 and 0 elements Reactions of group 1 and 7 elements 	https://www.bbc.co.uk/bitesize/guides/zwt2k2p/revision/1 https://www.bbc.co.uk/bitesize/guides/ztrdxs/revision/1	https://www.youtube.com/watch?v=IdS9roW7IzM&t=119s https://www.youtube.com/watch?v=uwzXfZoCP_k https://www.youtube.com/watch?v=dZGDUKQa_6g https://www.youtube.com/watch?v=HT1zAPQIBAQ
5.2.2 How bonding and structure are related to the properties of a substance	<ul style="list-style-type: none"> Interpreting melting and boiling point data to determine state at a certain temp State symbols Describe and explain properties of ionic compounds -describe and explain properties of simple covalent molecules -describe and explain properties of polymers -describe and explain properties of metals and alloys 	https://www.bbc.co.uk/bitesize/topics/z33rrwx	https://www.youtube.com/watch?v=leVxy7cjZMU https://www.youtube.com/watch?v=DECGNyC-x_s https://www.youtube.com/watch?v=EP0zfm_FVqc https://www.youtube.com/watch?v=A-wTpLPICd0
5.2.3 Structure and bonding of carbon	<ul style="list-style-type: none"> Describe and explain the properties of diamond, graphite, graphene and fullerenes 	https://www.bbc.co.uk/bitesize/guides/zgq8b82/revision/2	https://www.youtube.com/watch?v=tGH0mXCcEFU
5.4.1 The Reactivity of Metals	<ul style="list-style-type: none"> -Metals + oxygen -Reduction and oxidation in terms of oxygen -The Reactivity Series - Displacement reactions - Extraction of metals by reduction 	https://www.bbc.co.uk/bitesize/guides/zy7dgd/revision/1	https://www.youtube.com/watch?v=Lk1V0buHEFs https://www.youtube.com/watch?v=2i5Lm7BMtpo https://www.youtube.com/watch?v=MXTSels6e2Y

These specification points will be the **major focus** of this paper.

Exam date: 27th May

All other specification points from C1, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
5.4.2 Reactions of Acids	<ul style="list-style-type: none"> Naming Salts Products of the reactions between: <ul style="list-style-type: none"> acids and metals acids and alkalis and insoluble bases acids and metal carbonates pH scale and neutralisation 	https://www.bbc.co.uk/bitesize/guides/ztv2dxs/revision/1	https://www.youtube.com/watch?v=ofw6oHSYGF1 https://www.youtube.com/watch?v=QISsle_jSQ8
5.4.2.3 and Required Practical 8: preparation of a pure, dry sample of soluble salts	<ul style="list-style-type: none"> Describe a method of producing solid salt crystals from reaction between insoluble oxide or carbonate and acids Identifying errors in methods and reagents 	https://www.bbc.co.uk/bitesize/guides/ztv2dxs/revision/5	https://www.youtube.com/watch?v=9GH95172Js8&t=16s
5.4.3 Electrolysis	<ul style="list-style-type: none"> The process of electrolysis Electrolysis of molten ionic compounds Electrolysis of aluminium oxide Electrolysis of aqueous solutions 	https://www.bbc.co.uk/bitesize/guides/z9h9v9g/revision/1	https://www.youtube.com/watch?v=AhTRiL6xjBA&t=2s https://www.youtube.com/watch?v=iINOpROacf0 https://www.youtube.com/watch?v=YcyMEIBezAY https://www.youtube.com/watch?v=6WjC_Vi4roA
Required Practical 9: : investigate what happens when aqueous solutions are electrolysed using inert electrodes.	<ul style="list-style-type: none"> Developing a hypothesis Planning an investigation 	https://www.bbc.co.uk/bitesize/guides/z9h9v9g/revision/3	https://www.youtube.com/watch?v=ukbtTTG1Kew
Required Practical 10: investigate the variables that affect temperature changes in reacting solutions such as, e.g. acid plus metals, carbonates, neutralisations, displacement of metals	<ul style="list-style-type: none"> Identifying independent, dependent, control variables Analysing results Identifying exo and endothermic reactions from experimental results 	https://www.bbc.co.uk/bitesize/guides/z2b2k2p/revision/2	https://www.youtube.com/watch?v=Bz0C9mmF2tw

These specification points will be the **major focus** of this paper.

Exam date: 9th June

All other specification points from P1, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
<p>6.1.1 Energy Changes in a system, and the ways energy is stored before and after such changes</p>	<ul style="list-style-type: none"> identifying the energy changes in systems Calculate, using equations, the amount of energy associated with a moving object, a stretched spring and an object raised above ground level. Calculate, using an equation, the amount of energy stored in or released from a system as its temperature changes Calculate Power 	<p>https://www.bbc.co.uk/bitesize/guides/zskp7p3/revision/1</p> <p>https://www.bbc.co.uk/bitesize/guides/z8pk3k7/revision/1</p> <p>https://www.bbc.co.uk/bitesize/guides/zy8g3k7/revision/1</p>	<p>https://www.youtube.com/watch?v=JGwcDCeYRY0</p> <p>https://www.youtube.com/watch?v=-zy9eWzmGe4</p> <p>https://www.youtube.com/watch?v=Qw_9kX9PARc</p> <p>https://www.youtube.com/watch?v=63OTIdNb-TE</p> <p>https://www.youtube.com/watch?v=EDTODPhaaMY</p>
<p>Required Practical 14: an investigation to determine the specific heat capacity of one or more materials.</p>	<ul style="list-style-type: none"> linking the decrease of one energy store (or work done) to the increase in temperature and subsequent increase in thermal energy stored <p><i>Linked learning: efficiency and energy transfers in a system</i></p>	<p>https://www.bbc.co.uk/bitesize/guides/zy8g3k7/revision/4</p> <p>Efficiency - Work, power and efficiency - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</p>	<p>https://www.youtube.com/watch?v=Hs5x0-IU2F4</p> <p>https://www.youtube.com/watch?v=loeRLKNeUsc</p>
<p>6.1.3 National and global energy resources</p>	<ul style="list-style-type: none"> -describe renewable and non-renewable energy resource -compare advantages and disadvantages of different energy resources 	<p>https://www.bbc.co.uk/bitesize/guides/z2wfxfr/revision/1</p>	<p>https://www.youtube.com/watch?v=1dJKvxhGEgA</p> <p>https://www.youtube.com/watch?v=pqzvUur7QRw</p>

These specification points will be the **major focus** of this paper.

Exam date: 9th June

All other specification points from P1, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
6.2.1 Current, potential difference and resistance	<ul style="list-style-type: none"> • Circuit diagram symbols • Definition and units of electrical current and charge • Calculating charge flow using an equations • Definition and units of potential difference • Definition and units of resistance • Relationship between current, potential difference and resistance • Calculate current, potential difference or resistance using an equation • IV graphs of resistor at constant temp, filament lamp, diode • Applications of LDRs and thermistors 	https://www.bbc.co.uk/bitesize/guides/zgvq4qt/revision/1	https://www.youtube.com/watch?v=sFUmuujAcw https://www.youtube.com/watch?v=ts7WumFAaSg https://www.youtube.com/watch?v=hRojfU77c38
Required Practical 16: construct appropriate circuits to investigate the I–V characteristics of circuit elements, inc. a filament lamp, diode and a resistor at constant temp.	<ul style="list-style-type: none"> • Placing ammeter and voltmeter in the correct place in a circuit to measure the current through and potential difference across a component • Plotting graphs • Describing and explaining patterns shown in graphed data 	https://www.bbc.co.uk/bitesize/guides/zgvq4qt/revision/5	https://www.youtube.com/watch?v=A1SyKvdHoqY&t=29s

These specification points will be the **major focus** of this paper.

Exam date: 9th June

All other specification points from P1, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
6.3.1 Changes of state and the particle model	<ul style="list-style-type: none"> Define and calculate the density of a substance or object Recognise/draw simple diagrams to model the difference between solids, liquids and gases Explain the differences in density between the different states of matter in terms of the arrangement of atoms or molecules. Describe how, when substances change state mass is conserved. Describe changes of state as physical changes 	https://www.bbc.co.uk/bitesize/guides/zqjv6yc/revision/1 https://www.bbc.co.uk/bitesize/guides/zwwfxfr/revision/1	https://www.youtube.com/watch?v=hkBrw2fG75U https://www.youtube.com/watch?v=-EZmXVOSa20
6.4.2 Atoms and nuclear radiation	<ul style="list-style-type: none"> Radioactive decay, types of nuclear radiation and their properties Definition and units of activity and count rate Nuclear equations Half lives Contamination and irradiation 	https://www.bbc.co.uk/bitesize/guides/zxbnh39/revision/1 https://www.bbc.co.uk/bitesize/guides/zp4vfcw/revision/1	https://www.youtube.com/watch?v=FY1-JieCrg https://www.youtube.com/watch?v=nW0S1C6wVrg https://www.youtube.com/watch?v=wj9BzGFao8k https://www.youtube.com/watch?v=teGuOVAPIOo

These specification points will **not be assessed** on this paper.

Spec point NOT assessed
6.2.3 Domestic uses and safety
6.3.3 Particle Model and Pressure
6.4.1 Atoms and Isotopes

AQA GCSE Combined Science:
Foundation Tier
Paper 2
(biology, chemistry, physics)

These specification points will be the **major focus** of this paper.

Exam date: 15th June

All other specification points from B2, other those on these pages that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
4.5.3 Hormonal Control in Humans	<ul style="list-style-type: none"> • Definition of 'hormone' • function of the tissues and organs of the endocrine system • Identifying position of glands, and the hormones secreted from them • Hormones involved in control of blood glucose concentration • Type 1 and Type 2 diabetes 	https://www.bbc.co.uk/bitesize/guides/zq4mk2p/revision/1 (1 to 5)	https://www.youtube.com/watch?v=c6olhi88KZs https://www.youtube.com/watch?v=77oyUdNZ054
4.6.1 Reproduction	<ul style="list-style-type: none"> • Describe the structure of DNA, chromosomes • -definition of 'genome' and 'gene' • Definition of key inheritance terms e.g. heterozygous, recessive allele, phenotype • Construct punnett squares and determine probability • Describe inherited disorders • Make informed judgements about the economic, social and ethical issues concerning embryo screening, 	https://www.bbc.co.uk/bitesize/guides/zycmk2p/revision/3 https://www.bbc.co.uk/bitesize/guides/zcdfmsg/revision/1	https://www.youtube.com/watch?v=ww1TQXBQ6wQ https://www.youtube.com/watch?v=zNEtVaNQ0s8 https://www.youtube.com/watch?v=mvWY5lbUoHA https://www.youtube.com/watch?v=sYPwWHszLDO
4.7.1 Adaptations, interdependence and competition	<ul style="list-style-type: none"> • -Describe the different levels of organisation in an ecosystem • -Describe the importance of interdependence and competition in a community. • -Identify biotic and abiotic factors • -Suggest the factors for which organisms are competing in a given habitat 	https://www.bbc.co.uk/bitesize/guides/z86gpbk/revision/1 (1 to 7)	https://www.youtube.com/watch?v=XVD5izWXmKo https://www.youtube.com/watch?v=0mjafH5pVLA
4.7.2 Organisation of an ecosystem	<ul style="list-style-type: none"> • Interpret food chains and webs • Identify producers, consumers, predators and prey from food chains and webs • Describe the carbon and water cycles 	https://www.bbc.co.uk/bitesize/guides/zqskv9q/revision/1	https://www.youtube.com/watch?v=dRFQ8rZCK6Q https://www.youtube.com/watch?v=urzpnjwazVO

These specification points will be the **major focus** of this paper.

Exam date: 15th June

All other specification points from B2, other those on these pages that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
Required Practical 7: measure the population size of a common species in a habitat. Use sampling techniques to investigate the effect of a factor on the distribution of this species	<ul style="list-style-type: none"> Using transects and quadrats are used by ecologists to determine the distribution and abundance of species in an ecosystem. Understand the terms mean, mode and median Calculate arithmetic means 	https://www.bbc.co.uk/bitesize/guides/zqskv9q/revision/3	https://www.youtube.com/watch?v=2MW6nwf80XM https://www.youtube.com/watch?v=RhMOCxXcDrQ https://www.youtube.com/watch?v=yLHz2Ea10Mg&t=2s

These specification points will **not be assessed** on this paper.

Spec point NOT assessed	
4.5.2 The human nervous system	4.6.3.3 Extinction
4.5.3.3 Hormones in human reproduction	4.6.3.4 Resistant Bacteria
4.5.3.4 Contraception	4.7.1.4 Adaptations
4.6.1.1 Sexual and asexual reproduction	4.7.3.1 Biodiversity
4.6.1.2 Meiosis	4.7.3.3 Land Use
4.6.1.6 Sex Determination	4.7.3.4 Deforestation
4.6.2.1 Variation	4.7.3.5 Global Warming
4.6.2.2 Evolution	4.7.3.6 Maintaining Biodiversity
4.6.2.3 Selective Breeding	

These specification points will be the **major focus** of this paper.

Exam date: 20th June

All other specification points from C2, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
5.6.1 Rate of Reaction	<ul style="list-style-type: none"> Calculating the rate of a reaction Describe collision theory Define activation energy Describe and explain the factors that increase the rate of reaction Describe and explain the effect of catalysts on rate of reaction 	https://www.bbc.co.uk/bitesize/guides/zpkp7p3/revision/1	https://www.youtube.com/watch?v=UkrBJ6-uGFA https://www.youtube.com/watch?v=GCR5xeduq2o https://www.youtube.com/watch?v=-4HXaUBbv04 https://www.youtube.com/watch?v=he18fQjxcO8
Required Practical 11: investigate how concentration affects the rates of reaction by a method involving measuring the volume of a gas produced/change in colour	<ul style="list-style-type: none"> Identify independent, dependent and control variables Describe how to measure the dependent variable Analyse results and draw conclusions from graphed data Calculate rate of reaction from data 	https://www.bbc.co.uk/bitesize/guides/zpkp7p3/revision/6	https://www.youtube.com/watch?v=N5p06i9ilmo https://www.youtube.com/watch?v=GI6LVI7oAIU
5.6.2 Reversible reactions and dynamic equilibrium	<ul style="list-style-type: none"> Identify and give examples of reversible reactions Apply the conservation of energy to reversible reactions Define dynamic equilibrium 	https://www.bbc.co.uk/bitesize/guides/z32bpbk/revision/1 Only page 1	https://www.youtube.com/watch?v=66gcNNJfY6E
5.7.1 Carbon compounds as fuels and feedstock	<ul style="list-style-type: none"> Describe crude oil as a mixture of different length hydrocarbons; define the term hydrocarbon Identify the first 4 alkanes from their chemical formula and name them Describe the trend in properties as hydrocarbon chain length increases Describe and explain fractional distillation Describe the process of cracking Describe the use of alkenes 	https://www.bbc.co.uk/bitesize/guides/zxd4y4j/revision/1	https://www.youtube.com/watch?v=CX2IYWggEBc https://www.youtube.com/watch?v=3I7yCkSXPos https://www.youtube.com/watch?v=7AWwjKbRa_o

These specification points will be the **major focus** of this paper.

Exam date: 20th June

All other specification points from C2, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
5.8.1 Purity, formulations and chromatography	<ul style="list-style-type: none"> Define the term pure substance in chemistry Use melting and boiling point data to identify pure and impure substances Define the term formulation and give examples 	https://www.bbc.co.uk/bitesize/guides/zp2wrx/revision/1	https://www.youtube.com/watch?v=3oJxWwcnfJY
Required Practical 12: investigate how paper chromatography can be used to separate and tell the difference between coloured substances.	<ul style="list-style-type: none"> Describe the properties of the mixtures that chromatography can be used to separate Describe and explain the experimental process of chromatography Explain how substances are separated using chromatography Interpret chromatograms and calculate R_f values 	https://www.bbc.co.uk/bitesize/guides/zp2wrx/revision/3	https://www.youtube.com/watch?v=TdJ57SQ6GAQ https://www.youtube.com/watch?v=pnTGNAfu6GE
5.9.1 The composition and evolution of the Earth's Atmosphere	<ul style="list-style-type: none"> Describe the composition of the current atmosphere Describe the composition of the early atmosphere and explain theories of how the early atmosphere formed Explain how the early atmosphere changed to that of the present atmosphere 	https://www.bbc.co.uk/bitesize/guides/z9pk3k7/revision/1	https://www.youtube.com/watch?v=t1Z3GINldLA https://www.youtube.com/watch?v=I0h_-3M0Pso
5.9.3 Common atmospheric pollutants and their sources	<ul style="list-style-type: none"> State the atmospheric pollutants released into the atmosphere from the complete and incomplete combustion of fossil fuels Describe the negative impacts of these pollutants on health and the environment 	https://www.bbc.co.uk/bitesize/guides/zq3797h/revision/1	https://www.youtube.com/watch?v=yLp6LOgPHml
5.10.1 Using the Earth's resources and obtaining potable water	<ul style="list-style-type: none"> Describe the renewable and non-renewable resources that we get from the Earth and its atmosphere Define the term potable water Describe how potable water can be produced. Describe the differences in the treatment of waste water, salt water and ground water 	https://www.bbc.co.uk/bitesize/guides/zswfxfr/revision/1 https://www.bbc.co.uk/bitesize/guides/zg6cfcw/revision/1	https://www.youtube.com/watch?v=-XczTGavTZU https://www.youtube.com/watch?v=n7pYRQs20bl

These specification points will **not be assessed** on this paper.

Spec point NOT assessed

5.9.2 Carbon dioxide and methane as greenhouse gases

These specification points will be the **major focus** of this paper.

Exam date: 23rd June

All other specification points from P2, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
6.5.1 Forces and their interactions	<ul style="list-style-type: none"> Describe the difference between scalar and vector quantities and give examples Give examples of contact and non-contact forces Describe the relationship between mass, weight and gravitational field strength Use an equation to calculate weight Calculate the resultant force acting on an object Draw free body diagrams to describe qualitatively examples where several forces lead to a resultant force on an object, including balanced forces when the resultant force is zero 	<p>https://www.bbc.co.uk/bitesize/guides/zskn2nb/revision/1</p> <p>https://www.bbc.co.uk/bitesize/guides/zcxcfcw/revision/1</p> <p>https://www.bbc.co.uk/bitesize/guides/z232k2p/revision/1</p>	<p>https://www.youtube.com/watch?v=P11SWWUkMdQ</p> <p>https://www.youtube.com/watch?v=xxK8N23nx9M</p> <p>https://www.youtube.com/watch?v=W2aBVbcHr_k</p> <p>https://www.youtube.com/watch?v=PL8ATKipoB4</p>
6.5.4.1: Describing motion along a line	<ul style="list-style-type: none"> Describe the difference between distance and displacement Use an equation to calculate speed describe the difference between speed and velocity Interpret distance-time graphs and velocity-time graphs Use an equation to calculate acceleration Describe how an object reaches terminal velocity 	<p>https://www.bbc.co.uk/bitesize/guides/z2wy6yc/revision/1</p>	<p>https://www.youtube.com/watch?v=QaU9jMHh7gE</p> <p>https://www.youtube.com/watch?v=M_0FRIX8wIM</p> <p>https://www.youtube.com/watch?v=DkCw2C-DKT0</p> <p>https://www.youtube.com/watch?v=b0VKlpetP9A</p> <p>https://www.youtube.com/watch?v=Kzx8GBTI5VM</p>
6.5.4.2 Force, accelerations and Newton's Laws of motion	<ul style="list-style-type: none"> -Describe Newton's first law of motion -Describe Newton's second law of motion and use an equation to calculate the force required to make an object with a certain mass accelerate at a certain speed -Describe Newton's third law of motion 	<p>https://www.bbc.co.uk/bitesize/guides/zgv797h/revision/1</p>	<p>https://www.youtube.com/watch?v=i5PtaCJJFjw</p> <p>https://www.youtube.com/watch?v=DpQ_ikFKru0</p>

These specification points will be the **major focus** of this paper.

Exam date: 23rd June

All other specification points from P2, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
6.5.4.3: Forces and braking	<ul style="list-style-type: none"> Describe the stopping distance of a car Define thinking distance Describe factors that affect a driver's reaction time Evaluate measurements from methods to measure the different reaction times Define braking distance Describe factors that affect a car's braking distance Explain the dangers caused by large decelerations 	https://www.bbc.co.uk/bitesize/guides/zgv797h/revision/7	https://www.youtube.com/watch?v=drMKdcMq3o0
6.6.2 Electro-magnetic Waves	<ul style="list-style-type: none"> Describe the order of the electromagnetic spectrum Describe the properties of the different parts of the EM spectrum Describe the uses of the different parts of the EM spectrum Describe the hazards associated with the different parts of the EM spectrum Describe how changes in atoms and the nuclei of atoms can result in EM waves being generated 	https://www.bbc.co.uk/bitesize/guides/z3yq4qt/revision/3	https://www.youtube.com/watch?v=u5vkYjV1V1A&t=3s https://www.youtube.com/watch?v=L0iivb-acqU&list=RDLVu5vkYjV1V1A&index=2
Required Practical 21 investigate how the amount of infrared radiation absorbed or radiated by a surface depends on the nature of that surface.	<ul style="list-style-type: none"> Identify dependent, independent and variables Plan a method to ensure valid results are collected Draw conclusions from data 	https://www.bbc.co.uk/bitesize/guides/ztpm7p3/revision/1	https://www.youtube.com/watch?v=LFwio38EK9s

Physics Paper 2 - F

These specification points will be the **major focus** of this paper.

Exam date: 23rd June

All other specification points from P2, other those on the [next slide](#) that are not explicitly omitted, **may still be assessed** in multiple choice questions/linked to a previous answer, so cannot be completely ignored in your revision

Spec point	Concepts	Bitesize	YouTube
6.7.1: Permanent and induced magnetism, magnetic forces and fields	<ul style="list-style-type: none"> Describe the difference between a permanent and an induced magnet Describe the attraction and repulsion between unlike and like poles for permanent magnets . Define the 'magnetic field'. Describe the properties of the magnetic field of a magnet Describe how to plot the magnetic field of a magnet using a compass Draw the magnetic field pattern of a bar magnet Explain how a compass behaves when not in the magnetic field of a magnet 	https://www.bbc.co.uk/bitesize/guides/zpt9v9q/revision/1	https://www.youtube.com/watch?v=sRyy7-jEu3Q
6.7.2 The motor effect	<ul style="list-style-type: none"> Describe how an electromagnet is made Describe how to change the strength of the electromagnet 	https://www.bbc.co.uk/bitesize/guides/zg43y4j/revision/1 (just page 1)	https://www.youtube.com/watch?v=79_SF5AZtzo

These specification points will **not be assessed** on this paper.

Spec point NOT assessed

6.5.3 Forces and elasticity