Date	Topic	Lesson number	Lesson Title	Homework	Cover/Isolation work	Chemistry	Topic	Lesson number	Lesson Title	ear 11  Cover/Isolation work	Biology	Topic	Lesson number	Lesson Title	Cover/Isolation work	Physics
WB 08/09/25	C6 Rates	1	Measuring rates		https://continuityoak.org.uk/Lessons?r=7687 HT Only - https:// continuityoak.org.uk/Lessons?r=7690	<ul> <li>Collect and record data to measure the rate of reaction</li> <li>Plot a graph of the data obtained.</li> <li>Describe and explain patterns in the data collected</li> <li>Calculate the rate of the reaction</li> </ul>	B5 Homeostasis and response		Reflex Actions	https://continuityoak.org.uk/Lessons?r=8296	Describe what happens at a synapse  Label a diagram of a reflex arc, using key terms correctly  Describe the reflex response to stated stimuli	P5 Forces	1	Forces and Interactions	https://continuityoak.org.uk/Lessons?r=8797	<ul> <li>Describe the difference between scalar and vector quantities</li> <li>Describe forces as contact or non-contact and give examples</li> <li>Describe the interaction between forces between pairs of objects</li> </ul>
	C6 Rates	2	Effect of concentration - required practical 1		https://continuityoak.org.uk/Lessons?r=7699	<ul> <li>Collect and record data to investigate the effect of concentration on rates of reaction</li> <li>Display this data appropriately</li> <li>Describe and explain the effect of concentration on the rate of reaction</li> </ul>	B5 Homeostasis and response	3	Reaction Times - required practical 1	https://continuityoak.org.uk/Lessons?r=8297	Identify variables to change, measure and control  Collect, record and process data accurately  Display data collected & calculate uncertainties (this outcome is only appropriate if an alternative hypothesis is investigated)  Write a conclusion using evidence collected	P5 Forces	2	Weight, mass and Gravity	https://continuityoak.org.uk/Lessons?r=8802	<ul> <li>Describe how to find and represent the centre of mass of an object</li> <li>Describe the relationship between mass, weight and gravity</li> <li>Use the mathematical relationship to calculate any value, given the other two</li> </ul>
WB 15/09/25	C6 Rates	3	Effect of concentraction - required practical 2		https://continuityoak.org.uk/Lessons?r=7702	<ul> <li>Collect and record data to investigate the effect of concentration on rates of reaction</li> <li>Display this data appropriately</li> <li>Describe and explain the effect of concentration on the rate of reaction</li> </ul>	B5 Homeostasis and response	4	Reaction times - required practical 2	https://continuityoak.org.uk/Lessons?r=8300	Describe the pattern shown in secondary data  Decide on the reproducibility of reaction time practical data  Explain why using computer method for measuring reaction time is better than the ruler drop test.	P5 Forces	3	Resultant Forces	https://continuityoak.org.uk/Lessons?r=9659 https://continuityoak.org.uk/Lessons?r=8805	<ul> <li>Calculate resultant forces of forces acting in a straight line</li> <li>Describe the effect of resultant forces on objects</li> <li>Describe scalar and vector quantities and give examples</li> <li>(HT)Represent and interpret vector quantities using scale diagrams</li> <li>(HT)Draw and interpret vector diagrams representing multiple forces</li> </ul>
	C6 Rates	4	Effect of Temperature		https://continuityoak.org.uk/Lessons?r=7711	<ul> <li>Describe and explain the effect of temperature on rates of reaction, using particle theory.</li> <li>Process and analyse secondary data on the effect of temperature on the rate of reaction</li> <li>Present secondary data appropriately, explaining the choice of graph</li> </ul>	B5 Homeostasis and response	8	Hormonal response	https://continuityoak.org.uk/Lessons?r=8303	Describe how the endocrine system brings about responses in the body  Label the main endocrine glands of the body  Compare hormonal responses with nervous responses  Describe the action of thyroxine and adrenaline (HT)  Explain the concept of negative feedback (HT)	P5 Forces	4	Forces and Work - Practical	https://continuityoak.org.uk/Lessons?r=8808	<ul> <li>Describe energy transfers when work is done, including the effect of work done against frictional forces</li> <li>Calculate work done, force or distance given appropriate information</li> <li>Convert units where needed.</li> </ul>
WB 22/09/25	C6 Rates	5	Effect of surface area		https://continuityoak.org.uk/Lessons?r=7705	<ul> <li>Identify variables to change, measure and control to test a hypothesis</li> <li>Write a valid method to test the given hypothesis</li> <li>Describe and explain the effect of changing surface area on the rate of reaction</li> </ul>	B5 Homeostasis and response	9	MUA reteach/reapply/ reassess			P5 Forces	5	Forces and elasticity - part 1	https://continuityoak.org.uk/Lessons?r=11262	<ul> <li>Identify variables to change, measure and control in a given hypothesis</li> <li>Construct a table for result, including units</li> <li>Explain the steps in the method to test a given hypothesis</li> <li>Collect and display data appropriately.</li> </ul>
	C6 Rates	6	Pressure in gaseous reactions		https://continuityoak.org.uk/Lessons?r=7705	Describe and explain the effect of pressure on gaseous reaction	B5 Homeostasis and response	10	Homeostasis	https://continuityoak.org.uk/Lessons?r=8315	Write a definition for homeostasis  Identify the key components in control system from a description of the homeostatic response  Explain the importance of homeostasis in terms of enzymes and osmosis.	P5 Forces	6	Forces and elasticity - part 2	https://continuityoak.org.uk/Lessons?r=8811	<ul> <li>Recall and use a formula to calculate extension, force or spring constant</li> <li>Process secondary data</li> <li>Plot a graph of the data and use it to explain the limit of proportionality</li> <li>Relate stretching and compression to work done and calculate this.</li> </ul>
WB 29/09/25	C6 Rates	7	Effect of catalysts		https://continuityoak.org.uk/Lessons?r=7714	<ul> <li>Describe what a catalyst is and how it affects the rate of a reaction</li> <li>Explain why more than one catalyst is often needed</li> <li>Draw a reaction profile for a reaction with and without a catalyst</li> </ul>	B5 Homeostasis and response	12	Blood glucose Control	https://continuityoak.org.uk/Lessons?r=9353 https://continuityoak.org.ul Lessons?r=9353	Describe how blood glucose levels are monitored  Explain how insulin controls blood glucose levels in the body  Interpret and suggest explanation for blood glucose graph  Explain the role of glucagon in blood glucose level maintenance and how negative feedback is used (HT)	P5 Forces	12	Speed, Distance and Time	https://continuityoak.org.uk/Lessons?r=8814 https://continuityoak.org.uk/Lessons?r=8817	<ul> <li>Explain what is meant by the term 'average speed'</li> <li>Recall and apply a formula to calculate average speed, distance or time.</li> <li>Interpret distance time graphs and use them to calculate speed</li> </ul>
	C6 Rates	8	MUA reteach/reapply/ reassess				B5 Homeostasis and response	13	Diabetes and Treatment	https://continuityoak.org.uk/Lessons?r=8312	Compare Type 1 and Type 2 diabetes  Describe some treatments for both types of diabetes  Interpret data from graphs on the effect of insulin on blood glucose in people with and without diabetes  Describe the roles of male and female reproductive	P5 Forces	13	Acceleration	https://continuityoak.org.uk/Lessons?r=8820	<ul> <li>Describe the effect of balanced and unbalanced forces on motion</li> <li>Use an equation linking initial velocity, final velocity, acceleration and time to calculate any value given the others.</li> <li>Define and calculate uniform acceleration.</li> </ul>
WB 06/10/25	C6 Rates	9	Reversible reactions		https://continuityoak.org.uk/Lessons?r=7717	<ul> <li>Describe what is meant by a reversible reaction and how to represent it</li> <li>Explain how reversible exothermic and endothermic reactions are linked</li> <li>Explain what is meant by 'dynamic equilibrium'</li> </ul>	B5 Homeostasis and response	17	Reproductive hormones	https://continuityoak.org.uk/Lessons?r=8318 https://continuityoak.org.ul Lessons?r=9355	Describe the roles of mate and female reproductive hormones  Describe the stages of the menstrual cycle  Name and state the role of hormones involved in the menstrual cycle  Explain the interactions of FSH, LH, oestrogen and progesterone in the menstrual cycle (HT only)  Extract and use information from graphs showing hormone levels (HT only)	P5 Forces	14	Velocity and Acceleration	https://continuityoak.org.uk/Lessons?r=8823 https://continuityoak.org.uk/Lessons?r=8826	<ul> <li>Draw and interpret velocity time graphs to describe motion</li> <li>Calculate acceleration and (HT) distance travelled from a velocity time graph</li> <li>Compare distance time and velocity time graphs</li> <li>(HT) Describe circular motion</li> </ul>
		10	Le Chatelier's principle (HIGHER)		https://continuityoak.org.uk/Lessons?r=7720	<ul> <li>State and apply Le Chatelier's principle to any reversible reaction</li> <li>Describe the effect on equilibrium of changes to temperature and concentration</li> <li>Choose and explain the conditions needed to achieve a high yield</li> </ul>	B5 Homeostasis and response	18	Fertility Treatment (HIGHER)	https://continuityoak.org.uk/Lessons?r=8321	Describe how fertility drugs and IVF work  Interpret secondary data on fertility treatments and IVF  Evaluate fertility treatments from the perspective of doctors and patients  Describe how different methods of contraception	P5 Forces	15	Terminal Velocity	https://continuityoak.org.uk/Lessons?r=8826	<ul> <li>Describe and explain the motion of an object as it falls through a fluid</li> <li>Define terminal velocity using examples</li> <li>Recall and apply the value for freefall near the Earth's surface</li> </ul>
WB 13/10/25	C6 Rates	11	Pressure and Yield (HIGHER)		https://continuityoak.org.uk/Lessons?r=7723 https://continuityoak.org.uk/Lessons?r=7726	<ul> <li>Describe and explain the effect of changes in pressure on the equilibrium of gaseous reactions</li> <li>Describe and explain the conditions for optimum yield for a given reaction</li> </ul>	B5 Homeostasis and response	19	Methods of contraception	https://continuityoak.org.uk/Lessons?r=8324	Interpret data on the effectiveness and/or use of contraception methods  Evaluate different hormonal and non-hormonal methods	P5 Forces	16	MUA reteach/reapply/reassess		Apply Newton's First law to predict the
	C6 Rates	13	Revision				B5 Homeostasis and response	23	Revision	https://continuityoak.org.uk/Lessons?r=8327 https://continuityoak.org.u Lessons?r=9356		P5 Forces	17	Newton's 1st and 2nd Law	https://continuityoak.org.uk/Lessons?r=8829	<ul> <li>Estimate speed, accelerations and forces involved in large accelerations in everyday transport</li> <li>Use and recognise the sign for an approximate answer</li> </ul>
WB 20/10/25	C6 Rates	14	End of unit reteach/reapply/reassess lesson				B5 Homeostasis and response	24	End of unit reteach/ reapply/reassess lesson			P5 Forces	18	Acceleration - required practical 1	https://continuityoak.org.uk/Lessons?r=8832	<ul> <li>HT explain inertia and calculate inertial</li> <li>Identify variables to change, measure and control to test a hypothesis</li> <li>Explain the steps in the method to test a given hypothesis</li> <li>Process, display and interpret results appropriately to draw conclusions</li> </ul>
	C7 Organic chemistry	1	Crude oil and alkanes		https://continuityoak.org.uk/Lessons?r=7735	<ul> <li>Describe the composition of crude oil</li> <li>Draw the first five alkanes and write their chemical formulae</li> <li>Use the general chemical formula of alkanes</li> <li>Describe and explain how alkane chain length affects its boiling point</li> </ul>						P5 Forces	19	Acceleration - required practical 2	https://continuityoak.org.uk/Lessons?r=8835	<ul> <li>Write a method to test the effect of mass on acceleration, identifying variables to change, measure and control</li> <li>Describe the relationship between mass and acceleration</li> <li>Suggest sources of error in the investigation</li> <li>Use and apply the equations for acceleration</li> </ul>
WB 27/10/25 October half term																• Describe the factors that offect the
WB 03/11/25	C6 Rates	15	End of unit test Reteach/ Reapply/ reasses			Describe how crude oil is separated into fractions			End of unit test Reteach/			P5 Forces	20	Forces and braking	https://continuityoak.org.uk/Lessons?r=8837	<ul> <li>Describe the factors that affect the stopping distance of a vehicle</li> <li>Explain the dangers of large decelerations</li> <li>Recall typical results for, interpret and evaluate measurements from simple reaction time experiments</li> <li>Calculate the momentum of objects.</li> <li>Apply the conservation of momentum to</li> </ul>
	C7 Organic chemistry	2	Fractional distilation		https://continuityoak.org.uk/Lessons?r=7738	<ul> <li>Carry out the distillation of crude oil</li> <li>Describe trends in the physical and chemical properties of the fractions collected</li> <li>Describe the process and products of cracking</li> <li>Describe the test for alkenes and its positive result</li> </ul>	B5 Homeostasis and response	25	Reapply/ reasses		Describe the main features of meiosis	P5 Forces	21	Momentum (HIGHER)	https://continuityoak.org.uk/Lessons?r=8840	<ul><li>collisions and explosions.</li><li>Calculate the velocity of objects after collisions</li></ul>
WB 10/11/25	C7 Organic chemistry  C7 Organic chemistry		MUA reteach/reapply/ reassess		https://continuityoak.org.uk/Lessons?r=7741	<ul> <li>Explain why cracking is necessary</li> <li>Represent cracking using equations</li> </ul>	B6 Inheritance  B6 Inheritance	2	Meiosis and Fertilisation  Sexual and Asexual reproduction	https://continuityoak.org.uk/Lessons?r=8332  https://continuityoak.org.uk/Lessons?r=8335	Compare mitosis with meiosis  Explain the importance of meiosis in reproduction  Describe sexual and asexual reproduction in animals and plants  Explain why asexual reproduction leads to identical	P5 Forces	23	Revision  End of unit reteach/reapply/reassess less	https://continuityoak.org.uk/Lessons?r=9668 son	
WB 17/11/25	C7 Organic chemistry	5	Using the Crude oil products		https://continuityoak.org.uk/Lessons?r=7744	<ul> <li>Draw and name polymers</li> <li>Write and balance equations to represent combustion</li> <li>Use moles to balance equations for reactions of hydrocarbons</li> </ul>	B6 Inheritance	4	Genes, DNA and chromosomes	https://continuityoak.org.uk/Lessons?r=8338	Explain why sexual reproduction leads to variation  Define and recognize diagrams of DNA, genes and chromosomes  Describe the structure and function of DNA	P6 Waves	1	Waves	https://continuityoak.org.uk/Lessons?r=8849	<ul> <li>Identify the features of a longitudinal and transvers waves</li> <li>Describe the production of longitudinal</li> </ul>
						Calculate overall energy changes in combustion reactions	B6 Inheritance	6	Genetic Inheritance	https://continuityoak.org.uk/Lessons?r=9402 https://continuityoak.org.u Lessons?r=8344	Describe the advantages of understanding the human genome  Construct and interpret genetic diagrams.  Calculate the probability of inheriting particular characteristics given information about the parents  Use genetic terms to describe parents & offspring	P6 Waves	2	Wave calculations	https://continuityoak.org.uk/Lessons?r=9656	<ul> <li>and transverse waves</li> <li>Compare light and sound waves</li> <li>Calculate frequency from diagrams or information</li> <li>Use the equation period = 1/frequency to calculate time period or frequency</li> <li>Use the wave equation to calculate</li> </ul>
							B6 Inheritance	7	Inherited disorders	https://continuityoak.org.uk/Lessons?r=9404 https://continuityoak.org.ul Lessons?r=8347 https://continuityoak.org.uk/Lessons?r=8350	Describe the symptoms of the genetic diseases cystic fibrosis & polydactyly  Use genetic cross diagrams and family tree diagrams to calculate probability of offspring inheriting these diseases  Evaluate the use of embryo screening for inherited disorders	P6 Waves	3	Sound in Air	https://continuityoak.org.uk/Lessons?r=9651	<ul> <li>Speed, frequency or wavelength</li> <li>Calculate frequency from diagrams or information</li> <li>Make and record measurements to calculate the speed of sound in air</li> <li>Use the wave equation to calculate speed, frequency or wavelength</li> </ul>
WB 24/11/25							B6 Inheritance	8	Sex and Family Trees	https://continuityoak.org.uk/Lessons?r=8353	Name and recognise the chromosomes that determine sex  Construct and interpret diagrams to show how sex is inherited  Interpret family tree diagrams to explain the pattern of inheritance	P5 Forces	25	End of unit test Reteach/Reapply/ reasses		
WB 01/12/25							B6 Inheritance	10	Variation and Natural Selection	https://continuityoak.org.uk/Lessons?r=8359 https://continuityoak.org.u Lessons?r=11259	Describe reasons for extensive variation within species  Describe the effects of mutations  Explain how variation can lead to evolution by natural selection	P6 Waves	4	Wave speed in liquids - required practic	al https://continuityoak.org.uk/Lessons?r=8854	<ul> <li>Explain the steps taken in measuring the speed of waves in liquids and solids</li> <li>Process results appropriately</li> <li>Describe how to minimise error in the readings</li> <li>Explain the steps taken in measuring the</li> </ul>
							B6 Inheritance	11	Evolutiom and Extinction	https://continuityoak.org.uk/Lessons?r=8364	Interpret evolutionary trees  Explain why some organisms are now extinct  Describe some of the ways fossils are produced	P6 Waves	5	Wave speed in solids - required practica	https://continuityoak.org.uk/Lessons?r=8857	speed of waves in liquids and solids  • Process results appropriately  • Describe how to minimise error in the readings
WB 08/12/25							B6 Inheritance  B6 Inheritance	16	Evidence for Evolution - Fossils  Evidence for Evolution - Antibiotic resistant bacteria	https://continuityoak.org.uk/Lessons?r=8367  https://continuityoak.org.uk/Lessons?r=8370	Explain how this and other evidence gives us information about the development of life on Earth  Explain why we cannot be certain about how life on Earth began  Describe how bacteria have evolved to become resistant to antibiotics  Describe ways of reducing the development of antibiotic resistant bacteria					
WB 15/12/25							B5 Homeostasis and response  B6 Inheritance	.3333333333	End of unit test Reteach/ Reapply/ reasses  MUA reteach/reapply/ reassess		Evaluate the use of antibiotics in agriculture					
WB 22/12/25 Christmas holidays							B6 Inheritance	17	Selective Breeding	https://continuityoak.org.uk/Lessons?r=8373	Describe the process of selective breeding in plants and animals					
WB 05/01/26							B6 Inheritance	18	Genetic engineering	https://continuityoak.org.uk/Lessons?r=8376 https://continuityoak.org.ul Lessons?r=8379	Describe genetic engineering  Give examples of genetically modified organisms  Explain some potential benefits and risks of genetic engineering in agriculture and medicine  Describe the process of producing a genetically modified organism (HT)					
							B6 Inheritance  B6 Inheritance	20	Classification  Revision  End of unit reteach/	https://continuityoak.org.uk/Lessons?r=8382  https://continuityoak.org.uk/Lessons?r=8385 https://continuityoak.org.uk Lessons?r=9409	modified organism (HT)  Describe and apply the Linnaean system for classification  Explain why new models of classification have been proposed  Describe the 'three domain' classification system					