Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Intro to Science	What do I need to do/know in order to work safely in a science laboratory?	1. What are the rules of the science laboratory 2. What are hazard symbols? 3. Why are they important? 4. What is a Bunsen burner? 5. How do you light a Bunsen burner? 6. What is an observation? 7. How should you record observations in science? 8. How do I display data obtained from practicals? 9. What makes a good graph?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 7A Cells, tissues and organ systems	How do living things work?	1. What does it mean to be alive? 2. Which organs do what, and where? 3. Which organs do what, and where? (in plants) 4. What are organs made of? 5. How do we use microscopes? 6. What are animal and plant cells made of? 7. How do organs work together in animals and plants?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 7G The particle model	How does the arrangement of particles give solids, liquids and gases their properties?	1. What are the three states of matter? 2. What are the properties of the three states of matter? 3. How can you classify 'awkward' materials as solids, liquids or gases? 4. What is matter made up of? 5. How are particles arranged in solids, liquids and gases? 6. How can particle theory explain the properties of the three states of matter? 7. What is Brownian motion and how does it support particle theory? 8. How do you convert nanometres and metres? 9. What is diffusion? 10. How does diffusion occur in gases and liquids? 11. Why do some materials diffuse faster than others? 12. What is meant by gas pressure and what are its effects? 13. What causes gas pressure?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 7H Atoms, elements and mixtures	How are atoms, elements, mixtures and compounds important for everyday use?	1. What is the difference between an atom and a molecule? 2. How can you identify an element, mixture and compound from a particle diagram? 3. How and why are elements represented by symbols? 4. Do all elements have the same properties and uses? 5. Do we have an unlimited amount of elements? 6. What are the properties of metals and non-metals? 7. How do the properties of an element link to its uses? 8. What changes may occur when compounds are formed? 9. What are examples of common compounds? 10. How do you write word equations for chemical reactions? 11. What are the uses of decomposition reactions?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 7I Energy	How do we use energy in the world?	1. How do we get energy for our bodies? 2. Why do different people need different amounts of energy? 3. What is energy measured in? 4. How can we carry out an experiment to determine the energy within foods? 5. What are the safety rules when working with fire? 6. What are the precautions we need to be aware of during a science practical? 7. How can energy be transferred? 8. How can energy be stored? 9. What is the conservation of energy? 10. What are the 3 fossil fuels? 11. What are fossil fuels? 12. How are fossil fuels formed? 13. Why is nuclear energy non-renewable? 14. What is renewable energy? 15. What are examples of renewable energy? 16. What are the advantages of renewable energy?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 7K Forces	What are forces and how do they impact on our lives?	1. What effects do forces have on objects? 2. What are contact and non-contact forces? 3. How can you measure forces and what are their units? 4. How does the extension of a spring depend on the force applied? 5. What are the effects of friction? 6. How can friction be changed? 7. Where is friction useful and where is it not helpful? 8. How do you calculate pressure and what is its units? 9. What are the effects of high and low pressure in everyday scenarios? 10. What are balanced and unbalanced forces? 11. What are the effects of balanced and unbalanced forces?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 7J Current Electricity	What are electrical circuits?	1. How do switches work? 2. How are circuits and symbols drawn? 3. What happens when the number of bulbs in a circuit is changed? 4. What is current and how is it measured? 5. Why are models used? 6. What do parts of a physical model represent? 7. How can you use a physical model to explain electrical circuits? 8. What is a series and parallel circuit? 9. How can switches control a circuit? 10. How does changing the number or type of components in a circuit affect the current? 11. How does current behave in a series and parallel circuit? 12. What is a voltmeter and how is it used? 13. Why does current increase when the voltage increase? 14. What is the relationship between current and reisitance? 15. What are the appropriate safety precautions for using electricity? 16. What is the role of a fuse and circuit breaker? 17. How does a fuse work? 18. How are different wires connected in a plug?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 7C Muscles and Bones	How do our muscles and bones enable us to function?	1. How do muscles in the gas exchange system allow ventilation? 2. What are the components of the blood? 3. How does the circulatory system transport oxygen and carbon dioxide around the body? 4. What are the functions of different bones in the skeleton? 5. What are the different types of joints? 6. What are antagonistic pairs of muscles and how do they control movement? 7. How do different drugs affect the body?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 7B Sexual Reproduction in Animals	How do animals reproduce?	1. How do different animals reproduce sexually? 2. Where are the gametes produced? 3. What is the male reproductive system like? 4. What is the female reproductive system like? 5. How does sexual intercourse lead to a growing foetus? 6. What happens during the gestation period and birth? 7. What happens during puberty and adolescence?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Year 7 Topic 7E Solutions and MIxtures	How can different mixtures be separated?	1. What is a mixture? 2. What are the types of mixture? 3. How can mixtures be separated? 4. What is a solution? 5. What is a solvent or a solute? 6. How can we measure the solubility of a liquid? 7. What is meant by the conservation of mass in science? 8. What does it mean for a solution to be saturated? 9. How does temperature affect solubility? 10. How can solutes be separated from a solution? 11. What are the differences between boiling and evaporation? 12. Can you assess risks with scientific equipment? 13. How can solutes be separated from a solution? 14. What are the differences between boiling and evaporation? 15. Can you assess risks with scientific equipment? 16. How chromatography can be used to identify substances in a mixture? 17. How does chromatography work? 18. How can distillation be used to separate a solvent from a solution? 19. How can distillation be useful in everyday life?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 7F Acids and Alkalis	What are the uses of acids and alkalis?	1. What are hazard symbols? 2. Why are hazard symbols important? 3. What are examples of common acids? 4. Where do indicators come from? 5. How can indicators be used to test for acidic, alkaline or neutral solutions? 6. What are common examples of acids and alkalis? 7. What is the pH scale and how is it useful? 8. How can pH be measured? 9. What happens during neutralisation? 10. How do you write word equations for neutralisation reactions? 11. What pH changes occur during neutralisation? 12. What are examples of everyday acids and bases? 13. What are examples of everyday neutralisation reactions?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 7L Sound	What is sound and why can we hear things?	1. What causes sound and how do you make louder sounds? 2. What is the link between frequency and pitch? 3. How does sound move through materials? 4. Why does sound get fainter further from their source? 5. What are the parts of the ear and how do they function? 6. How do microphones convert sound into electrical signals? 7. What are the hearing ranges of different animals? 8. What are the uses of ultrasound? 9. How does sonar and echolocation work? 10. What are the differences between longitudinal and transverse waves? 11. Can waves be reflected? 12. What doe superposition mean?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 7D Ecosystems	Why do different animals live in different places?	1. What is a species? 2. How can variation be continuous and discontinuous? 3. What are adaptations? 4. How are animals adapted to their environments? 5. How is inherited variation caused? 6. What causes environmental variation? 7. What adaptations occur for daily and seasonal changes? 8. How do organisms affect their habitats and communities? 9. How do organisms compete? 10. How can you use a food web to make predictions? 11. How do you use pyramids of numbers to describe how energy is lost in a food chain? 12. Why are pesticides need to be used carefully?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions in the homework booklet. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 8H Rocks	What are the different types of rock and how are they formed?	1. How are the textures of rocks different? 2. How are the properties of rock linked to their texture? 3. What are the uses of rocks? 4. What is the structure of the Earth? 5. How are igneous and metamorphic rocks formed? 6. How does grain size give evidence for the speed of cooling? 7. How can weathering break up rocks? 8. How are weathered rocks eroded? 9. How are sedimentary rocks formed? 10. What is the texture of sedimentary rocks? 11. How does the rock cycle link the three types of rock? 12. How are metals obtained? What are the advantages of recycling metals?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 8A Diet	What makes a balanced diet and how does our body digest food?	1. Why do we need food? 2. Which foods are good sources of carbohydrates, fats, proteins and fibre. 3. What is a balanced diet? 4. What do food labels tell us? 5. Why do different people need different amounts of energy from food? 6. What is a deficiency? 7. How does malnutrition occur? 8. What are the consequences of the lack of a nutrient? 9. What are the main parts of the human digestive system? 10. Why do we digest food? 11. What are the functions of the organs in the digestive system? 12. How do enzymes help break down food?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 8K Energy transfer	How is energy transferred and how can we reduce heat loss?	1. How is internal energy different form temperature? 2. How can you determine the direction in which energy will be transferred? 3. What happens to particles when a liquid evaporates? 4. How is energy transferred by radiation, conduction and convection? 5. How can you use the particle model to explain the energy transfers in matter? 6. How can you reduce waste in energy transfers? 7. What do power and efficiency mean? 8. How do you calculate efficiency? 9. What is a Sankey diagram? 10. How do power companies charge for energy used? 11. What is a payback time? 12. How do you work out payback time?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 8F Periodic Table	How do elements fit into the periodic table?	1. What was Dalton's atomic model? 2. How are elements represented on the periodic table? 3. What is the difference between a chemical and a physical change? 4. What happens to atoms during chemical changes? 5. How do you write chemical formula? 6. How can you use the periodic table to find the elements with similar properties? 7. What are some typical properties of alkali metals, halogens and noble gases? 8. How is the periodic table arranged? 9. What are melting, freezing and boiling points? 10. Where are the metals and non-metals on the periodic table? 11. How do some elements react with water? 12. How can you make predictions about chemical properties using the periodic table?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 8B Plants and Reproduction	How do we group living organisms?	1. How is classification useful? 2. How do you use a sample to estimate size? 3. What is sexual and asexual reproduction? 4. What are the characteristics of offspring from sexual and asexual reporduction? 5. How do plants reproduce? 6. How does pollen travel for cross-pollination? 7. How does fertilisation lead to the development of a seed? 8. What is the function of seeds in fruits?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 8I Fluids	What are the properties of fluids?	What are the properties of solids, liquids and gases? How are particles arranged in solids, liquids and gases? Why do materials expand and contract when the temperature changes? How does the volume and mass relate to density? How can the density of an object be determined? What happens to the temperature of a substance as it changes state? What happens to the particle arrangement as the temperature increases? What happens to particle energy as the temperature increases? What happens to the particle arrangement as the temperature decreases? What happens to particle energy as the temperature decreases? How does fluid pressure change with depth and height? How can gas pressure can be increased? How does pressure link to the particle model? What is upthrust? Why do objects float? What factors effect upthrust? Which forces increase and decrease drag? What causes drag? What is the relationship between drag and speed?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 8D Unicellular organisms	What are the examples and characteristics of unicellular organisms?	1. How can you use cell features to identify members of different kingdoms? 2. What are the differences between unicellular and multicellular organisms? 3. How are yeasts used in brewing and baking? 4. How do yeasts reproduce and what factors limit this? 5. Why are anaerobic bacteria used to make yoghurt and cheese? 6. What are the functions and parts of a bacterial cell? 7. How do bacteria reproduce? 8. What are the parts and functions of a protoctict cell? 9. How do algae make their own food? 10. What are the importance of decomposers? 11. What is the carbon cycle?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 8G Metals and their uses.	What are the uses of metals and how do they react?	1. What are the properties of metals? 2. How do you write word equations using metals and non-metals? 3. What is a catalyst and what are they used for? 4. What happens during corrosion and rusting? 5. How can metals be protected from corrosion? 6. How do you identify products and reactants in a symbol equation? 7. What happens when metals react with water? 8. How do you place metals in order of reactivity? 9. How do you write symbol equations for reactions? 10. How do metals react with acids? 11. What are alloys and why do we use them? 12. How can we use a model to represent an alloy? 13. How do we identify a pure substance by looking at their melting and boiling points?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 8C Breathing and Respiration	How is our body designed to produce energy?	1. What happens in aerobic respiration? 2. What is the function of the organs in the gas exchange system? 3. How does the structure of the lungs allow efficient gas exchange? 4. What effect does exercise have on breathing and heartbeat rates? 5. How do substances reach respiring cells and how is waste returned to the blood? 6. What are the causes and effects of a reduced oxygen supply on the body? 7. What is anaerobic respiration? 8. How does gas exchange occur in other organisms? 9. What are the effects of anaerobic respiration during and after hard exercise?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 8E Combustion	What is combustion and what are oxidation reactions?	1. What is a combustion reaction? 2. What is a hydrocarbon? 3. What are the products of combustion reactions? 4. What happens to the mass in a chemical reaction? 5. What is oxidation? 6. What products are formed by the oxidation of metal? 7. What is the fire triangle? 8. How can the fire triangle be used to manage fires? 9. What are the hazard symbols for substances likely to cause fires? 10. Can you identify the control variables in an experiment and describe how to control them? 11. Why it is important to carry out a fair test? 12. What pollutants are formed from burning fuels? 13. What problems to the environment can these pollutants cause? 14. How can we manage the effects of these pollutants?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 8J Light	How does light behave and why do we see things?	1. How can we represent light in diagrams? 2. What happens when light hits different surfaces? 3. What is an image like in a plane mirror? 4. Why does light change direction when it enters different materials? 5. How can we use lenses? 6. Why does total internal reflection happen and what can we use it for? 7. How do our eyes work? 8. What are the differences between our eyes and cameras? 9. Why do different coloured objects look different colours? 10. How are different colours of ight made? 11. How can different coloured filters and paints be used to make objects look different colours?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 9I Forces and motion	How do forces affect the movement of objects?	1. What are the different types of forces? 2. What are the effects of balanced and unbalanced forces? 3. Why do moving objects have a top speed? 4. How can energy be stored and transferred? 5. What is the conservation of energy? 6. What does efficiency mean? 7. What is speed and mean speed? 8. What is the formula that relates speed, distance and time? 9. How can we represent a journey using a distance-time graph? 10. How can a simple lever multiply forces r distances? 11. What is the load, effort and pivot around a level? 12. What factors affect the size of a moment? 13. Why will something balance if the moments are equal and opposite? 14. How can simple machines magnify forces? 15. What factor affect the total work done?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is revision of the topic's knowledge organiser. Students will be quizzed weekly /10 on firefly. Student results will be recorded on a tracking sheet. Students will complete 2 high stakes quizzes in class per half term.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 9B Plant Growth	How do plants grow?	1. What happens when plants photosynthesise and respire? 2. What affects the rate of photosynthesis? 3. How are leaves, roots and stems adapted for their function? 4. How do substances enter and leave plants? 5. What is starch and how is it made? 6. What is the chemical test for starch? 7. What chemicals are needed for plants to germinate? 8. Why are plants cross bred? 9. How does increased human population affect food supply? 10. How is selective breeding done?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 9A Genetics and evolution	How does our environment and genetic information make us all different?	1. What is environmental variation? 2. How can environmental variation cause problems with classification? 3. How do you identify different types of inherited variation? 4. How does sexual reproduction cause inherited variation? 5. What is a normal distribution? 6. What is the structure of DNA? 7. What is the importance of DNA? 8. What is the relationship between chromosomes, DNA, genes, genetic information and nuclei? 9. How do organisms become endangered or extinct? 10. How do adaptations affect the survival of organisms? 11. How do you preserve biodiversity? 12. How does natural selection work on genetic variations?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 8L Earth and Space	Why is the Earth so unique?	1. How can we investigate planets? 2. How can we model the solar system? 3. Why do we get changes in seasons? 4. What is the pattern of light and dark at the Earths poles? 5. How do magnets work? 6. What is the Earths magnetic field and how does it affect compasses? 7. How do you find the shape of a magnetic field? 8. How do you calculate weight? 9. What factor affect the strength of gravity? 10. How does gravity affect objects in space? 11. What are stars, galaxies and constellations? 12. What is the milky way? 13. What is a light year?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 9E Making materials	How are different materials made and what are their uses?	1. What are ceramics? 2. What are the uses of ceramics? 3. How do the uses depend on their structure? 4. What is a polymer? 5. What are the uses of polymers? 6. How are polymers made? 7. What is a composite material? 8. What are the uses of composite materials? 9. What are endothermic and exothermic reactions? 10. How can making materials cause problems? 11. How can we reduce these problems? 12. What are the advantages of recycling? 13. How are materials recycled?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic Working Scientifically	What skills do I need when working scientifically?	1. What is a variable? 2. Can you identify the control variables, independent and dependent variables in an experiment? 3. What is a hypothesis the difference between a hypothesis and prediction? 4. How do we write a hypothesis and prediction? 5. How do we write a scientific method? 6. What is the difference between accurate and precise data? 7. How are scientific equations or formulae are used to work things out? 8. How is the mean is calculated? 9. How are equations rearranged? 10. Why are standard units used by scientists around the world? 11. What are the names of common equipment used in science? 12. How do we draw scientific diagrams? 13. How can data be represented? 14. How are graphs and charts drawn? 15. How do we draw a line of best fit? 16. What does the shape of the graph tell us about the relationship between the variables? 17. What does a conclusion sum up in an investigation? 18. What should be used to explain a conclusion? 19. Why should results be evaluated?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 9F Reactivity	What are the different types of chemical reactions?	1. What are the differences between chemical and physical reactions? 2. How can particle theory explain gas pressure? 3. How do metals react with air, water and acids? 4. How are metals placed into a reactivity series? 5. How are metals protected from rusting? 6. What is the test for oxygen? 7. How can you speed up a combustion reaction? 8. What are endothermic and exothermic reactions? 9. Why do some reactions need a supply of energy? 10. What is a displacement reaction? 11. How can we predict whether a reaction will occur or not? 12. Why is the method of extracting a metal related to its cost and reactivity? 13. How are metals extracted from their ores? 14. What is oxidation and redction?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.

Calendar	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher feedback point (TFP)	Homework
Topic 9J Force fields and electromagnets	What are the uses of electricity and how can we control current?	1. What is a force field? 2. What is the shape of a magnetic field? 3. What factors affect the strength of gravity? 4. How can you calculate the weight of a mass? 5. Why can insulating material be given a charge by rubbing? 6. How do electrically charged objects affect each other? 7. What is an electric field? 8. How can switches be used to control different parts of a circuit? 9. How does current behave in series and parallel circuits? 10. How does voltage behave in series and parallel circuits? 11. What factors affect resistance? 12. What is the formula that relates voltage, current and resistance? 13. What is an electromagnet? 14. How can you change the strength of an electromagnet? 15. What are the uses of electromagnets?	Each Ks3 module is followed by a common assessed task (CAT). This is comprised of a mixture of exam questions based on that topic. Exam questions are obtained from ExamPro. Teacher will mark exam questions and provide a class feedback sheet. Students will NTG by responding to marking. Optional: there is an assessment for each topic in the Pearsons SOW.	Homework is set weekly. Students given knowledge (previously taught) to study and then complete questions. This is fed back in the revisit phase every week.