

Faculty	ADT
Head of Faculty	Mr P Clark
HoF Email	pclark@airedaleacademy.com
Faculty Staff	P Clark, N Amos, T Fulford, H O'Neill & E Cazals

Subject Name	Art
Subject Lead	Mr N Amos
Subject Lead email	namos@airedaleacademy.com
Periods per week	1
Core / Option	Core

Overview

In Year 7 Art students will extend basic skills and develop new ones through a series of linked projects. The projects students will study in Year 7 will be aimed at developing their core art skills whilst allowing them to explore a range of techniques and materials. They will also study the work of several artists and learn to analyse and understand their styles and techniques.

Units Studied

Observational drawing and still life

Studying the work of artists such as: Paul Klee, L.S. Lowry and Andy Warhol

Ceramics (thumb pots)

Painting skills and techniques

Graphics - Lettering

Mixed Media

One-point perspective

Assessment

Students will be continuously assessed throughout each project through questioning, formative assessment and peer assessment. At the end of each project students will achieve a final grade for that unit of study. Year 7 will also be assessed through a series of PPE's which will take place at regular intervals throughout the year.

Other Information

The Art Department is open after school on certain days for each year group to come and explore their ideas and develop their skills.

Faculty	ADT
Head of Faculty	Mr P Clark
HoF Email	pclark@airedaleacademy.com
Faculty Staff	P Clark, H O'Neill, E Cazals & E Shaw

Subject Name	Engineering Design / Food Nutrition
Periods per week	1
Core / Option	Core

Overview

Engineering Design

Students develop communication techniques in order to be able communicate engineering designs. 2D and 3D sketching and drawing methods are developed. Designs are rendered and annotated with appropriate information. Successful designs may be manufactured. Students will also have the opportunity to manufacture products in 3D.

Food and Nutrition

In Food and Nutrition students establish a range of skills in the Food Technology suite.

Units Studied

n/a

Assessment

Students will be assessed through class based assessments of both written and practical aspects.

Other Information

n/a

Faculty	Performing Arts
Head of Faculty	Mr G Woodfine
HoF Email	gwoodfine@airedaleacademy.com
Department Staff	R Kelly, D Lowe

Subject Name	Dance
Periods per week	2 (on a carousel with Musical Theatre & Drama ½ termly)
Core / Option	Option

Overview

Thematic based dance classes based on topics studied in discover. Students will develop their knowledge of performance and choreographic skills through practical dance lessons. Great opportunities for students to work together to improve their self-esteem, confidence and creativity.

Units Studied

Topic 1 – Introduction to Dance

Looking at techniques, physical skills, expressive skills and technical skills

Action, space, dynamics, relationship, basic health & safety.

Topic 2 – Choreography

How to create and develop dance choreography with the inspiration from a range of stimuli. Research into practitioners such as Merce Cunningham and chance dance.

Assessment

Half Termly - Through videoed/ live performances, log books and pupil progression diaries

Other Information

- Lots of extra curriculum activities on offer.
 - Opportunities for live performances and theatre trips.
 - Whole school productions and visitor workshops.
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Faculty	Performing Arts
Head of Faculty	Mr G Woodfine
HoF Email	gwoodfine@airedaleacademy.com
Department Staff	J Boner

Subject Name	Drama
Periods per week	1
Core / Option	Core

Overview

Drama is a practical based course, focusing on the performance skills which students will need in order to progress in this subject area. Students will study a range of practical based and process based (SMSC) topics.

Each of the following units will rely heavily on the students being able to use a range of Explorative Strategies and Drama Medium.

- | | |
|---------------------------------|--|
| Explorative strategies include: | The drama medium includes: |
| *Still image | *The use of costume |
| *Thought -tracking | *The use of masks and/or make-up |
| *Narrating | *The use of sound and/or music |
| *Hot-seating | *The use of lighting |
| *Role Play | *The use of space and/or levels |
| *Cross-cutting | *The use of set and/or props |
| *Forum theatre | *The use of movement, mime and gesture |
| *Marking the moment | *The use of voice |
| | *The use of spoken language |

Units Studied

Topic 1 – Introduction to Drama

Looking at skills and techniques in Drama and how to apply them

- Rehearsal skills and performance techniques
- Vocal and physical skill

Topic 2 – Story Telling and script work

Applying prior knowledge learnt in initial block to professional performances pieces and devising from a script.

Assessment

Each topic lasts half a term and the students are assessed at the end of each topic. This is in the form of practical assessment including video evidence (internal use only) and a progress log book kept by the students.

Other Information

Students will have the opportunity to attend many different extra-curricular activities. This will include the weekly drama club and the whole school production.

Faculty	English
Head of Faculty	Miss A Blaikie
HoF Email	ablaikie@airedaleacademy.com
Faculty Staff	A Blaikie, J Richmond, G Skyner, K Wilson, S Heath, N Ennis, F Galtrey, S Lowe, J Wilson and K Sissons

Subject Name	English
Periods per week	3
Core / Option	Core

Overview

Teaching at Key Stage 3 is centred around the National Curriculum. Students will have acquired some ability to use the fundamental elements of English (reading, writing and spoken communication). The curriculum will provide opportunities for students to communicate, compose and comprehend through a variety of tasks.

Units Studied

Autumn Term 1 – Island and Disasters

This topic includes a range of writing formats and purposes to assess and develop writing skills and grammar. There is also a speaking and listening assessment to allow students to practise speaking and listening skills for different purposes.

Autumn Term 2 – Context & the World at War – A History of Literature

This scheme allows students to explore themes and analyse language choices in an historical text. Students will be exposed to a range of text types that make up our literary heritage. The scheme includes exploration of historical context and the impact of the time on the text.

Spring Term – ‘Buddy’ or ‘Bone Sparrow’

Classes will study one of the two modern texts, allowing them to understand narrative structure, key choices in narratives selected for effect and to complete a range of writing tasks related to the texts, such as diary writing and transactional writing tasks, such as leaflet and review writing.

Summer Term 1 – Descriptive Writing

Students will creatively explore and produce descriptive writing, developing their understanding of how to use language for effect and to build reader engagement. The scheme explores grammar and specific language choices and techniques to develop the students’ control and understanding of how the English language can be used.

Summer Term 2 – ‘Growing Up’ poetry

This scheme of work allows students to know and understand social and emotional issues as well as exploring poetic devices and techniques. As well as analysis of language, transactional writing tasks, such as report writing and article writing will be explored using poetry as a stimulus.

Assessment

Students will be assessed formatively throughout schemes through the use of questioning, a range of tasks and regular marking of books using the department policy.

All classes will be given the opportunity to complete an independent writing/ reading assessment, using learning from recent lessons to inform and develop skills in extended writing. This is marked and assessed through whole class feedback/ self or peer assessment or teacher assessment.

Throughout the year, students will be assessed following the whole school assessment calendar. This will include both a reading comprehension and writing task, which will be assessed and moderated in department. These grades will be communicated to parents formally.

Other Information

Year 7 students will have one lesson a week in English for Accelerated Reading. This will include independent reading time, assessment using the Accelerated Reading programme on school computers, guided reading sessions and one-to-one reading with their teacher within the lesson. Progress in reading and understanding is monitored and tested using the Accelerated Reading programme to check and manage progress by the class teacher.

Subject	Transition
Head of Transition	Mr. J. Podlewski
HoD Email	jpodlewski@airedaleacademy.com
Department Staff	J Podlewski, G Skyner, R Kelly, M Aramburu, R Singleton & S Wharin

Subject Name	Transition
Periods per week	1
Core / Option	Core

Overview

The transition lessons are designed to help our new students settle into life at Airedale Academy. This is particularly important as we haven't been able to deliver transition as normal this year so we want to make sure we support our new students as best as we can during this time. We have collaborated with the PiXL group to deliver an exciting lesson package for our students.

Units Studied

1. Being Awesome
2. Unlocking Your Mind
3. Dare To Take Risks
4. Making The Change
5. Lost But Not Lost
6. Bouncebackability
7. What Is Normal Anyway?
8. Friendships & Fallouts
9. Living Well

Assessment

Pupils will be assessed through written prices and photographic evidence of meeting their success criterion.

Other Information

n/a

Faculty	Humanities
Head of Faculty	Mrs K Causier
HoF Email	kcausier@airedaleacademy.com
Faculty Staff	K Causier, S Chambers & S Le Gall

Subject Name	French
Periods per week	1-2
Core / Option	Core

Overview

Students will experience learning in 4 skill areas of Listening, Reading, Speaking and Writing. They will also experience translation, transcription, extended listening and reading authentic texts. We will aim to inspire further learning and a love of French culture, film and literature

Students also look at the geography, culture and customs of France and other French speaking countries.

Units Studied

Term 1:

Personal information & physical appearance
Personality, family and friends

Term 2:

School life & school uniform
Sports & leisure activities

Term 3:

Holidays & weather
Food & culture

Assessment

Students will be assessed formally during the calendared Assessment dates on the Academy calendar. They will also receive ongoing assessment in class throughout the year. Assessments will cover listening, speaking, reading and writing.

Other Information

n/a

Faculty	Humanities
Head of Faculty	Mrs K Causier
HoF Email	kcausier@airedaleacademy.com
Faculty Staff	R Duddridge, K Elliot & O Robinson

Subject Name	Geography
Periods per week	2
Core / Option	Core

Overview

Geography enables students to study the world around them at a local, regional and national scale. It includes both human and physical aspects as well as considering environmental issues.

Units Studied

Term 1 - Geographical Enquiry and Skills. In this unit, students will develop OS map skills including grid references, scale and map symbols. They will also learn about the geography of the UK

Term 1 - Migration – This unit focusses on current changes across South America, and African countries such as Kenya. Students will look at why and where people are migrating to and opportunities and issues this creates. Pupils will look at Rio De Janeiro in Brazil and the opportunities and challenges that exist.

Term 2 – Extreme Weather – Pupils will begin by looking at extreme weather events that have hit the UK over recent years and the issues that it has created. We will then travel to North America where we will look at the causes and effects of hurricanes and tornadoes.

Term 2 - Coastal Environments - In this unit, students will study the formation of coastal landforms and how we can protect the UK coastline from erosion and flooding. Pupils will focus this section of the topic on the Holderness Coastline.

Term 3 - People Everywhere. In this unit, students will learn about how world population has grown and where people have settled in the world and reasons for this. They will also study how land is used in a city.

Assessment

Students will be assessed on a half-termly basis using a combination of end of unit tests and assessed pieces of writing.

Other Information

n/a

Faculty	History
Head of Faculty	Mrs K Causier
HoF Email	kcausier@airedaleacademy.com
Faculty Staff	L Snaith, H Tordoff, C Hannam & J Podlewski

Subject Name	History
Periods per week	2
Core / Option	Core

Overview

History sparks pupils' curiosity and imagination, moving and inspiring them with the dilemmas, choices and beliefs of people in the past. It helps pupils develop their own identities through an understanding of history at personal, local, national and international levels. It helps them to ask and answer questions of the present by engaging with the past. Pupils find out about the history of their community, Britain, Europe and the world. They develop a chronological overview that enables them to make connections within and across different periods and societies.

Units Studied

Term One:

What is History?; The Roman Invasion; The Viking Invasion; The Norman Conquest; students investigate the struggle for power before 1066 and discover the result and impact of various invasions.

Term Two:

Life in Medieval Britain; Power, Monarchy vs. Church; students discover how different people lived in Medieval Britain and consider the impact of struggle between monarchy and church.

Term Three:

Students will further investigate religious change in England and the impact of the struggle between Monarchy, Church and Parliament during the Tudor and Stuart periods.

Assessment

Students will be assessed on a termly basis using a combination of end of unit tests and assessed pieces of writing.

Other Information

n/a

Faculty	Business & ICT
Head of Faculty	Mr L Wharin
HoF Email	lwharin@airedaleacademy.com
Faculty Staff	S Wharin, L Robinson & S Dakin

Subject Name	ICT
Periods per week	1
Core / Option	Core

Overview

The IT and Computing Framework breaks down the Computing program of study into three strands. These three strands are

1. ICT
2. Media
3. Computing

Units Studied

In year 7 the course is split in to six different projects, two each term.

Project 1: Upskilling and initial assessment

This project involves an introduction to the subject and good practices such as having a strong password, and using sensible file names and folders. A baseline test will also be taken.

Project 2: E- Safety

This project involves students learning how to stay safe on the internet and how to keep any personal details safe. They will also learn how to use the security settings on social networking sites such as blocking people and reporting abuse.

Project 3: Computing Fundamentals

This project involves the students learning all about the inner workings of their PCs. They will learn how each component functions in the PC and what role it plays in making a PC work. They will learn about Operating Systems and other important software in use on every PC.

Project 4: Graphics

This project involves learning how to create graphics. Students will learn about different graphic types, and learn a range of graphics editing skills.

Project 5: Spreadsheets

This project involves the students learning how to use Microsoft Excel. They will learn how to enter data and format the data in a professional way. They will also create formulas and functions to make even the hardest task seem easy and learn how to present the data in the form of graphs and charts.

Project 6: Programming

This project involves the students learning programming fundamentals. Students will use Python to code and solve problems. They will learn how variables, strings, loops and conditional statements are used to produce solutions and perform tasks on the computer.

Assessment

Formal assessment every half term.

Other Information

n/a

Faculty	Maths
Head of Faculty	Mrs L Thompson
HoF Email	lthompson@airedaleacademy.com
Faculty Staff	L Thompson, S Moore, S Kemp, M Arbon, M Robinson, L Greaves, M Aramburu, K Durant, J Hough and H Rotherforth

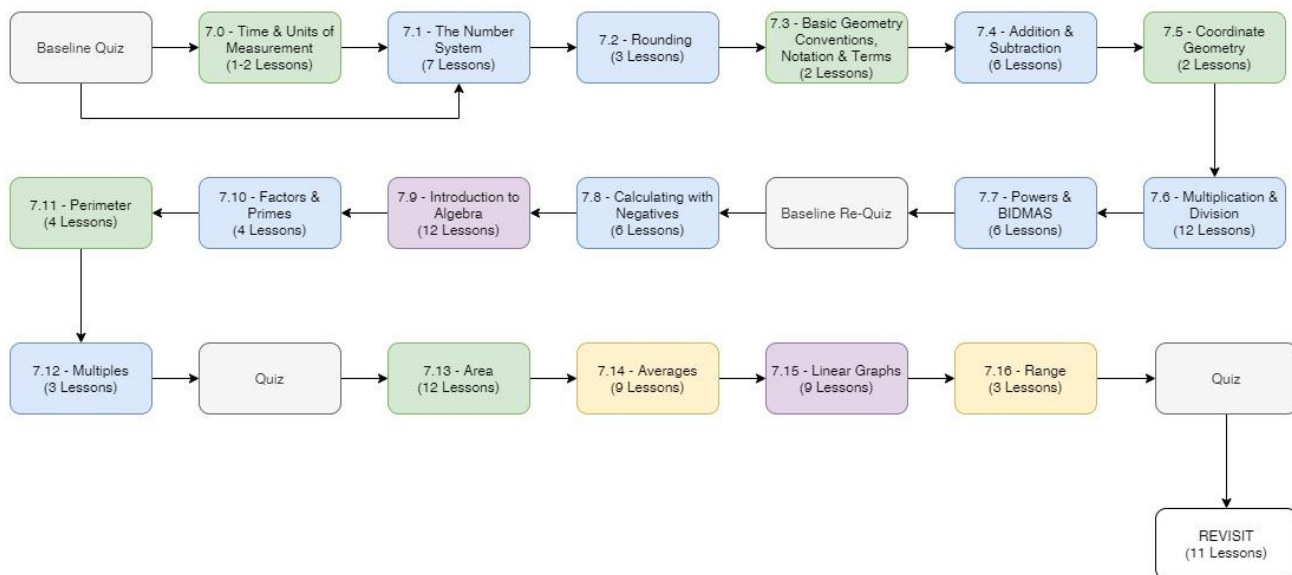
Subject Name	Maths
Periods per week	3
Core / Option	Core

Overview

During year 7 students will be taught mathematics from the areas of number; algebra; geometry and measures; statistics.

Units Studied

Year 7



Assessment

In quizzes students are expected to demonstrate their learning from all of the units that have been delivered since the last quiz took place.

Students are expected to take PRIDE in their work. We will expect to see:

- Underlined learning objective and date
- Worked examples with any additional notes
- Numbered questions
- Clear method with all workings out shown
- Students marking work and responding to feedback in purple pen

Homework will be set on www.hegartymaths.com and students who wish to undertake further independent study use this platform for that too. Students having issues accessing HegartyMaths should speak to their maths teacher.

Other Information

Students should come to lesson equipped with: black/blue pen, purple pen, pencil, ruler, and a scientific calculator (we recommend the Casio fx83-GTX).

Faculty	Performing Arts
Head of Faculty	Mr G Woodfine
HoF Email	gwoodfine@airedaleacademy.com
Department Staff	G Woodfine

Subject Name	Music
Periods per week	1
Core / Option	Core

Overview

Intent – The National Curriculum for music aims to ensure that all pupils perform, listen to, review and evaluate music, sing with confidence, create and compose music and understand and explore how music is created, produced and communicated.

Implementation - Our curriculum ensures students study a wide range of music, including that of the great composers, through composition, listening and performance opportunities. Students learn to perform and compose on a variety of instruments and are encouraged to sing with confidence. Musical vocabulary is consistently so that students are able to appraise articulately.

Impact – We aim to develop self-confident, creative and proud musicians who are able to compose, perform and listen with increasing discrimination to a wide genre of music.

KS2 – Students come to us with a wide range of backgrounds therefore our year 7 topics aim to provide a solid musical foundation but also challenge those that may be further ahead.

Units Studied

Unit 1 – African Drumming

Students learn how to perform and compose rhythms through African Drumming.

Unit 2 – Keyboard Skills

This unit uses knowledge from unit 1 to embed keyboard technique, rhythms and the treble clef. Students complete a range of keyboard exercises before performing their first song.

Unit 3 – Instruments of the Orchestra and the Elements of Music

Through a range of listening exercises students will be able to actively identify instruments, family of instruments and their musical effect. Students' are introduced to famous composers throughout the main eras.

Unit 4 – Bandlab

Students use their polyrhythm rhythm grid understanding from unit 1, keyboard skills from unit 2 and instrumentation from unit 3 to create a small piece of EDM music.

Unit 5 – China

Learning about the cultures and traditions of China and how these underpin a strong musical tradition. Students will compose a piece of music using the pentatonic scale and ternary form.

Assessment

Each topic has an interim and final assessment. Assessment will focus on a composition or performance alongside a listening or knowledge based quiz.

Other Information

At Airedale we have a thriving extra-curricular programme that will further students development in music. In addition, students can take extra-lessons on a variety of instruments.

Faculty	Performing Arts
Head of Faculty	Mr G Woodfine
HoF Email	gwoodfine@airedaleacademy.com
Faculty Staff	J Annakin & J Boner

Subject Name	Musical Theatre
Periods per week	2 (on a carousel with Dance & Drama ½ termly)
Core / Option	Core

Overview

n/a

Units Studied

	<u>1st Half Term</u>	<u>2nd Half Term</u>
<u>Topic</u>	<u>What is Musical Theatre?</u> Singing, Dancing & Acting – a Triple Threat <u>Types of Musical Theatre</u> Book Musicals, Sung Through Musicals, Juke Box Musicals, Operetta and Concept Musical.	<u>Job roles within the industry</u> On stage and off stage
<u>Practical Exploration</u>	<u>Oliver!</u> Acting through song ‘Food, Glorious Food’ ‘Consider Yourself’ ‘I’d Do Anything’.	<u>Hairspray</u> A concept musical Movement & Song ‘Good Morning Baltimore’ ‘You Can’t Stop the Beat’.
<u>Core Skills Covered</u>	The ‘Ensemble’ team work, whole group, safety in the environment, fitness & health. The Teacher as Director /Choreographer/ Musical Director (link to professionalism) Confidence in performance	Small group work and professional roles within rehearsal and production: <i>Warm Up</i> <i>Scribe</i> <i>Rehearsal Schedule</i> <i>Dance Captain</i> <i>Director</i> <i>Wardrobe Mistress</i> <i>Stage Manager</i> Musical styles/eras 1950’s Confidence in small groups
<u>Remote & promoted personal research study</u>	One musical of choice per week creating a fact file to share with others in the group	One role of choice per week creating a fact file to share with others in the group.

Assessment

n/a

Other Information

n/a

Faculty	PE, Health & Wellbeing
Head of Faculty	Mr R Singleton
HoF Email	rsingleton@airedaleacademy.com
Faculty Staff	K Ball, E Phelan, M Dye, E Harrap and D Lowe

Subject Name	PE
Subject Lead	Mrs K Ball
Subject Lead email	kball@airedaleacademy.com
Periods per week	2
Core / Option	Core

Overview

The Physical Education curriculum at Airedale Academy enables all pupils to enjoy and succeed in many kinds of physical activity. Students will develop a wide range of skills and the ability to use tactics, strategies and compositional ideas to perform successfully. They will develop the confidence to take part in different physical activities and learn about the value of healthy, active lifestyles. Physical Education helps students to discover what they like to do and what their aptitudes are at school, and how and where to get involved in physical activity helps them make informed choices about lifelong physical activity

Units Studied

Students are encouraged to take on different roles and responsibilities, including leadership, coaching and officiating. Lessons are taught through game orientated activities to develop students' tactical ability and knowledge of rules. Lessons explore exciting new sports from around the world and give students the opportunity to enhance their engagement with the new concepts, processes and techniques.

Sporting areas including;

- Invasion games – football, rugby, netball, basketball, tchoukball, handball, American football, uni-hockey
- Net and wall activities – badminton, table tennis, tennis, volleyball
- Striking and fielding sports – rounders, baseball, table tennis, cricket
- Physical Challenge – athletics, orienteering
- Artistic performance – trampolining, gymnastics
- Health and Fitness – circuits, weights, fitness suite, cross-country, method of training, bikes

Assessment

Assessment is frequent throughout lessons in the form of Q&A and through performance. At the end of each unit, students are given the opportunity to demonstrate their overall skills and capabilities in that activity. Attitude to learning grades are also given to students in line with the school policy.

Other Information

Extra-curricular activities provide great opportunities for students to participate in an Airedale Academy team. A varied extra-curricular programme allows different opportunities for students to become involved in physical activity with the options of specific coaching to improve performance and maintain participation. Enrichment opportunities such as educational trips, Inter-School sporting events and coaching courses are also offered. Airedale Academy is proud to have designed

a comfortable and smart PE kit that students wear with pride in all lessons.

Faculty	Science
Head of Faculty	Mr S Miller
HoF Email	smiller@airedaleacademy.com
Faculty Staff	S Miller, M Sanderson, M Matthewman, J Milner, A Howse, T Wadsworth, J Halman, E Walker, D Cox

Subject Name	Science
Periods per week	3
Core / Option	Core

Overview

Students follow the “10 Big Ideas” themes throughout Y7 to Y9

		COMPONENTS			
		PART 1		PART 2	
BIG IDEA		Complexity of topic increases →			
COMPOSITES	Electromagnets	Resistance & current	Voltage	Magnetism	Electromagnetism
	Matter	Particle model	Separating mixtures	Periodic table	Elements
	Organisms	Movement	Cells	Breathing	Digestion
	Forces	Speed	Gravity	Contact forces	Pressure
	Reactions	Metals/non-metals	Acids and alkalis	Chemical energy	Types of reaction
	Genes	Variation	Human reproduction	Evolution	Inheritance
	Energy	Energy costs	Energy transfer	Work	Heating & cooling
	Earth	Earth structure	Universe	Climate	Earth resources
	Waves	Sound	Light	Wave effects	Wave properties
	Ecosystem	Interdependence	Plant reproduction	Respiration	Photosynthesis

Units Studied

Year 7	Electromagnets Part 1	Matter Part 1	Organisms Part 1	Forces Part 1	Reactions Part 1	Waves Part 1	Energy Part 1	Ecosystems Part 1
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Electromagnets

Topic	NC statements to be covered
Current & resistance Pt 1	<ul style="list-style-type: none"> differences in resistance between conducting and insulating components (quantitative) electric current, measured in amperes, in circuits, series and parallel circuits, currents add where branches meet and current as flow of charge interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions – resistance practical

Voltage Pt 1	<ul style="list-style-type: none"> potential difference, measured in volts, battery and bulb ratings; resistance, measured in ohms, as the ratio of potential difference (p.d.) to current separation of positive or negative charges when objects are rubbed together: transfer of electrons, forces between charged objects the idea of electric field, forces acting across the space between objects not in contact evaluate data, showing awareness of potential sources of random and systematic error – data given for resistance
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Matter

Topic	NC statements to be covered
Particle model Pt 1	<ul style="list-style-type: none"> the differences in arrangements, in motion and in closeness of particles explaining changes of state, shape and density; the anomaly of ice-water transition atoms and molecules as particles the properties of the different states of matter (solid, liquid and gas) in terms of the particle model, including gas pressure changes of state in terms of the particle model
Separating mixtures Pt 1	<ul style="list-style-type: none"> the concept of a pure substance the identification of pure substances mixtures, including dissolving diffusion in terms of the particle model simple techniques for separating mixtures: filtration, evaporation, distillation and chromatography use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety

Organisms

Topic	NC statements to be covered
Movement Pt 1	<ul style="list-style-type: none"> the structure and functions of the human skeleton, to include support, protection, movement and making blood cells biomechanics – the interaction between skeleton and muscles, including the measurement of force exerted by different muscles the function of muscles and examples of antagonistic muscles
Cells Pt 1.	<ul style="list-style-type: none"> cells as the fundamental unit of living organisms, including how to observe, interpret and record cell structure using a light microscope the functions of the cell wall, cell membrane, cytoplasm, nucleus, vacuole, mitochondria and chloroplasts the similarities and differences between plant and animal cells the role of diffusion in the movement of materials in and between cells diffusion in liquids and gases driven by differences in concentration the structural adaptations of some unicellular organisms the hierarchical organisation of multicellular organisms: from cells to tissues to organs to systems to organisms make predictions using scientific knowledge and understanding – diffusion experiment

Forces

Topic	NC statements to be covered
Speed Pt 1	<ul style="list-style-type: none"> • speed and the quantitative relationship between average speed, distance and time (speed = distance ÷ time) • the representation of a journey on a distance-time graph • relative motion: trains and cars passing one another • forces being needed to cause objects to stop or start moving, or to change their speed or direction of motion (qualitative only) • change depending on direction of force and its size • use and derive simple equations and carry out appropriate calculations
Gravity Pt 1	<ul style="list-style-type: none"> • forces as pushes or pulls, arising from the interaction between 2 objects • non-contact forces: gravity forces acting at a distance on Earth and in space, forces between magnets, and forces due to static electricity • gravity force, weight = mass x gravitational field strength (g), on Earth g=10 N/kg, different on other planets and stars; gravity forces between Earth and Moon, and between Earth and sun (qualitative only) • apply mathematical concepts and calculate results

Reactions

Topic	NC statements to be covered
Metals & non-metals Pt 1	<ul style="list-style-type: none"> • the properties of metals and non-metals • the chemical properties of metal and non-metal oxides with respect to acidity
Acids and alkalis Pt 1	<ul style="list-style-type: none"> • defining acids and alkalis in terms of neutralisation reactions • the pH scale for measuring acidity/alkalinity; and indicators • reactions of acids with metals to produce a salt plus hydrogen • reactions of acids with alkalis to produce a salt plus water • evaluate risks

Waves

Topic	NC statements to be covered
Sound Pt 1	<ul style="list-style-type: none"> • frequencies of sound waves, measured in hertz (Hz); echoes, reflection and absorption of sound • sound needs a medium to travel, the speed of sound in air, in water, in solids • sound produced by vibrations of objects, in loudspeakers, detected by their effects on microphone diaphragm and the ear drum; sound waves are longitudinal • the auditory range of humans and animals
Light Pt 1	<ul style="list-style-type: none"> • the similarities and differences between light waves and waves in matter • light waves travelling through a vacuum; speed of light • colours and the different frequencies of light, white light and prisms (qualitative only); differential colour effects in absorption and diffuse reflection

Energy

Topic	NC statements to be covered
Energy costs Pt 1	<ul style="list-style-type: none"> comparing energy values of different foods (from labels) (kJ) comparing power ratings of appliances in watts (W, kW) comparing amounts of energy transferred (J, kJ, kW hour) domestic fuel bills, fuel use and costs fuels and energy resources undertake basic data analysis including simple statistical techniques – energy in food
Energy transfers Pt 1	<ul style="list-style-type: none"> energy as a quantity that can be quantified and calculated; the total energy has the same value before and after a change simple machines give bigger force but at the expense of smaller movement (and vice versa): product of force and displacement unchanged heating and thermal equilibrium: temperature difference between 2 objects leading to energy transfer from the hotter to the cooler one, through contact (conduction) or radiation; such transfers tending to reduce the temperature difference; use of insulators other processes that involve energy transfer: changing motion, dropping an object, completing an electrical circuit, stretching a spring, metabolism of food, burning fuels identify further questions arising from their results – conductors and materials to use

Ecosystems

Topic	NC statements to be covered
Interdependence Pt 1	<ul style="list-style-type: none"> the dependence of almost all life on Earth on the ability of photosynthetic organisms, such as plants and algae, to use sunlight in photosynthesis to build organic molecules that are an essential energy store and to maintain levels of oxygen and carbon dioxide in the atmosphere the interdependence of organisms in an ecosystem, including food webs and insect pollinated crops the importance of plant reproduction through insect pollination in human food security how organisms affect, and are affected by, their environment, including the accumulation of toxic materials apply sampling techniques use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety
Plant reproduction Pt 1	<ul style="list-style-type: none"> reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms present reasoned explanations, including explaining data in relation to predictions and hypotheses – number of seeds/mass of seeds

Assessment

For each Big Idea, students will complete:

- one 'response time' – which will include feedback provided using the whole class feedback proforma. Students will be expected to respond to feedback provided using DOT marking.
- one multiple-choice, end of topic test

Homework is set weekly using Educake and will consist of approximately 9-15 questions.

In addition, students will also undertake written papers in line with the academy's assessment calendar.

Other Information

The Science Faculty holds regular revision sessions after school. Ask your teacher for more information.

Faculty	PE, Health & Wellbeing
Head of Faculty	Ryan Singleton
HoF Email	rsingleton@airedaleacademy.com
Department Staff	J Coleyshaw

Subject Name	Student Wellbeing
Subject Lead	Mrs J Coleyshaw
Subject Lead email	jcoleyshaw@airedaleacademy.com
Periods per week	1
Core / Option	Core

Overview

Student Wellbeing allows students to develop their personal skills as well as their understanding of the wider world outside of school and how they can keep themselves safe from harm. It gives students the opportunity to learn about topics they would not learn about in conventional lessons within set lessons and also through guest speakers.

Units Studied

Student wellbeing is split into six different topics of learning each with a different teaching focus throughout the year students will look at risk and keeping themselves safe, finance and career pathways, sex and relationships, identity society and equality, citizenship and health and wellbeing. Within each of these areas students will do different activities including discussions, debates, group work and individual research tasks.

Assessment

Students will assess themselves at the beginning and the end of each of the topics of work against set knowledge based criteria, they will also reflect on their own learning throughout each unit of work to see how their attitudes, thoughts and opinions of different topics have changed.

Other Information

n/a
