



Ark Ayrton Foundation Offer

An essential part of our Horizons Curriculum

At Ark Ayrton we pride ourselves on the development of individuals by promoting a sense of curiosity and excitement about the world and encouraging motivation and resilience. We offer a conscious and responsive cross curricular, thematic approach which is imaginative, exciting and actively contributes to the learning experiences of all our children.



With our literature spine at the heart of our curriculum, over the course of a year, children learn all that they need to, in order to leave us being well rounded members of society. History and Geography themes drive the learning within our units. History focuses on ensuring that both knowledge and skills are taught together, so that our children become great Historians. Each unit has a Geography Study, whereby again, both knowledge and skills are taught to ensure that our children become great Geographers. Our units are organised in chronological order to ensure that children understand where British history fits in context.

To make the learning relevant and engaging, cross-curricular links are made throughout the topic and children are encouraged to apply skills and knowledge from all areas to complete real-life challenges and investigations. A variety of teaching strategies are employed with an emphasis on creativity to motivate and encourage a life-long love of learning. We are well placed to make the most of all that Portsmouth and the surrounding areas have to offer and we plan frequent trips to museums, galleries, zoos, castles, farms and theatres, to enrich and broaden the curriculum. Where appropriate we encourage children to take responsibility for their own learning by completing homework projects based on topic themes. Key knowledge which needs to be taught for each unit is organised into a Knowledge Organiser, which children take home before they learn about the unit.

Ark Ayrton Topic Overview

	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Autumn	London's Burning	On the Ocean Wave	Stone, Iron and Bronze Ages	Roman Empire	Tudor England	World War II
Geography Study	Parts of the Earth	Artic and Antarctic	Hills, mountains, coasts and land changes over time.	Volcanoes	Sir Francis Drake – mapwork	Field Study D Day – why Portsmouth.
Spring 1	People who change the World	Space Quest	Greeks	Anglo Saxons and Scots to Vikings	Victorians	Mayans
Geography Study	Non EU Countries	Continents				
Spring 2	Dinosaurs	Britain Today				
Geography Study	Non EU Countries	Climate change	Olympic countries- Athens VS London	Europe	British Empire India VS London	Rivers Amazon
Summer	Toys	Rainforest	Egyptians	Knights and their castles	Heroes and Villains	Hollywood
Geography Study	Field study Local comparison	Field study QE Country Park	Field study River Nile VS River Hamble	Field study Coastal investigation	Weather Water cycle	Mapwork



English and Maths skills are taught daily to ensure our children become competent and proficient learners. English and Maths are also embraced through topic work to ensure children have the opportunity to tackle real life, relevant situations with increased confidence.

We pride ourselves on our broad and balanced curriculum and provide numerous opportunities for our children to be involved in representing our school in concerts, football tournaments and debating competitions. We also provide a range of after school activities, such as Cooking Club, Glee Club and Reading Club. Our music club and curriculum provision is enhanced by a specialist teacher who works with every year group over the course of a year and has supported groups of children to take part in county, as well as national, concerts. Visits to the local library are built in to our half-termly timetables and we provide exciting opportunities to learn through theatre groups, visiting authors and poets and also hold regular themed days that link to British Values.



Computing



At Ark Ayrton Academy we provide a high-quality computing education in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Our computing curriculum aims to ensure that pupils become digitally literate and are able to use and communicate their ideas and information safely within the digital world.

Our Computing curriculum is based on units of work from 'Purple Mash'. The units have been personalised for the needs of our school to ensure lessons are purposeful within our topic theme. Each class has a weekly computing slot however use of ICT is also integrated across the curriculum with each year group having access to its own laptop trolley and tablets. The computing and programming elements of the curriculum are taught using the software Purple Mash provide. E-safety is embedded across all learning and each class is to set up their own blog this year.



Science



Science is a fascinating subject that allows children to explore the world around them, ask big questions and begin to think like scientists would in the real world.

At Ark Ayrton we focus on both teaching scientific knowledge and developing pupils' practical and investigation skills. We aim to develop children's scientific knowledge by using our local and wider environment to

enhance the learning and bring learning to life. Each year group will cover between four and six science units throughout the year. Most units include a pupil-led investigation which will allow pupils to take the lead, develop their scientific thinking and apply the knowledge that they have learnt to a range of practical situations. The aim of this is to encourage the children to think as scientists. Children receive a Knowledge Organiser for Science, which contains all of the skills and knowledge that they will learn for that unit. Alongside this, it also links to prior learning; ensuring that children are always building on their prior knowledge.

Science Overview

	Year One	Year Two	Year Three	Year Four	Year Five	Year Six

Autumn	Everyday materials	Everyday materials	Rocks	States of matter	Properties and changes of materials	Evolution and inheritance
Spring	Plants Seasonal changes	Space Animals including humans	Plants Forces and magnets	Living things and their habitats Animals including humans	Living things and their habitats Animals including humans	Living things and their habitats Animals including humans
Summer	Animals including humans	Living things and their habitats Plants	Light Animals including humans	Sound Electricity	Earth and space Forces	Light Electricity

Throughout Key Stage One and Two, units are revisited and built on so that key concepts are consolidated. Science is a core subject that we combine very effectively with many other subjects including Design and Technology, English, Maths and Geography to create exciting and engaging topics. We aim to develop pupil's scientific thinking and use of scientific language so that when children move onto Key Stage Three they have a strong base of core scientific ideas and they are already confidently thinking like scientist.

Physical Education



At Ark Ayrton we place great value on Physical Education (PE) and it is taught weekly to all year groups. Through gym, dance, athletics and swimming, learning covers a range of concepts with a major focus on the progression of key movement skills and the introduction and participation in age appropriate sports. There is an overarching aim of developing personal fitness and a positive view towards both physical activities and competitive challenges. We have recently had training on 'Real

PE' and therefore teachers ensure that Physical Education develops the following skills within each child: Creativity, physical, social, personal, cognitive and health and fitness.

Beyond explicit PE sessions, we strive to make health, fitness and physical activity a part of our wider ethos. Equipment and supervision are provided to facilitate active play and links are made with wider subjects where appropriate (including Personal, Social and Health Education and science). As a school we are active members of the 'Golden Mile' scheme whereby every child and

member of staff walk or run a mapped route for 10 minutes every day. Miles completed are tallied and certificates awarded as necessary to very proud children.

SMSC



Spiritual, moral, social and cultural understanding (SMSC) is integral to our school curriculum and ethos and is embedded through day to day classroom activities such as discussion and circle times, through assemblies, curriculum content and skills. We have an expectation of good manners and behaviour and this is evident in the

relationships established between children themselves and between children and adults in our school. We consciously plan in charity days, which are in response to our families and the struggles they are experiencing. We have a School Council with representatives from every class and we regularly raise money for a variety of charities through bake sales, dress up days and fetes. We celebrate achievements across a broad and balanced curriculum including reading, writing and maths, sport, art, behaviour and social development.



Religious Education

Religious Education is taught discreetly at Ayrton and is an enlightening subject that allows children to explore the different cultures and diverse communities that live within the world.

Ark Ayrton follows the programmes of study outlined in '*Living Difference*', the locally agreed syllabus for Hampshire. Through this syllabus children explore a different key concept each half term, following a conceptual enquiry approach. In each unit children follow the same cycle of enquiry: communicate, apply, enquire, contextualise and evaluate.

Children are introduced to different groups of concepts as follows:

- concepts common to all human experience
- concepts shared by many religions
- Concepts specific to religions.



These concepts are supported through our daily collective worship, by visits from the church and themed assemblies delivered by teachers.

RE Overview						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Celebration	Sacred	Remembering	Welcoming	Celebrating Birth	God
Year 2	Symbol	Light as a symbol	Sacred	Sad and happy	Change	Holy
Year 3	Symbol	Belonging	Angels	Changing emotions	Service	Symbols
Year 4	Holy	Ritual	Wisdom	Ritual	Identity	Rituals
Year 5	Belonging	Interpretation	Creation	Resurrection	Umma	Wisdom
Year 6	Sacrifice	Prophecy	Ritual	Stewardship	Peace	A good life

Pedagogy of our Foundation subjects

As our Horizons curriculum includes everything we teach the children, we firmly believe that the same principles that we apply to the teaching, learning and assessment of English, Maths and Science, should be the same in our foundation subjects. Doug Lemov advocates that you should ‘seek constant opportunities to assess what your kids can do while you’re teaching and use that knowledge to inform what you do and teach’.¹ For this reason, we ensure that at the beginning of every foundation lesson previous learning is recapped. This is to ensure that key knowledge is retained and that the children understand their learning in context. Furthermore, we identify that in order for knowledge to move from the short to long term memory, it needs constant repetition and recapping. This is why teachers will seek any opportunity to revise foundation content. In addition to this, we also ensure our working walls for our foundation lessons are updated each lesson with modelled learning and scaffolding where needed. The principles of great teaching, through modelling, scaffolding and challenged are applied to our foundation subjects as well. In order to check the children’s learning, we ask them to provide a summary of their learning in the foundation subjects. This is differentiated across the Academy, depending on the age group of the children. In order to ensure that our children are motivated and engaged in their learning, every Friday we have half an hour of ‘catching curiosity’.. Teachers use this weekly plenary as an opportunity to check for understanding and retention of what they have taught. In the book ‘Outstanding Teaching: Teaching Backwards’, they believe that in order to motivate learners, we must

¹ Doug Lemov – Teach Like a Champion 2010

find out what it is that they want to learn.² It is this belief that we also agree with and therefore during ‘catching curiosity, not only do children discuss what they have learnt that week, they also tell the teacher what they want to learn the following week.

Assessment of our Foundation subjects

Weekly Assessment

On a weekly basis for History, Geography and Science, children complete a quiz the week after to check what they can recall from previous learning in another year group, alongside what they learnt the week before. Knowledge which has not been retained is then revisited through ‘Do nows’. Each lesson contains mini plenaries, which check for understanding and address any possible misconceptions.

Termly Assessment

At the end of each half term, or term, depending on how long the unit is, children complete a quiz to test their retention of the knowledge that they have been taught throughout the unit. Alongside this, children also write an essay whereby they answer all of the key questions on the knowledge organiser, which they have been taught. Staff also complete fortnightly tracking of the skills that are being taught and these are highlighted off for each child. Knowledge that has been identified as not being retained, is then revisited the following term and revised at the start of each lesson to ensure that it is committed from short to long term memory.

Progression of Skills across the Academy

Each of the National Curriculum statements have been broken down into skills that we teach our children each year. We firmly believe that skills and knowledge combine together to ensure great learning takes place in the foundation subjects.

² Teaching Backwards – Outstanding Teaching; Osiris Education 2015