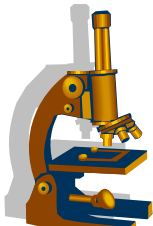


# Atlantic Centre of Excellence Multi Academy Trust

## AGE RELATED EXPECTATIONS – YEAR 5

In the tables below, you'll find a list of end of year expectations.

<b>SCIENCE</b>	
<b>Working scientifically</b>	
<ul style="list-style-type: none"><li>➤ Can your child plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary?</li><li>➤ Can your child identify scientific evidence that has been used to support or refute ideas or arguments?</li><li>➤ Can your child take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate?</li><li>➤ Can your child use test results to make predictions to set up further comparative and fair tests?</li><li>➤ Can your child record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs?</li><li>➤ Can your child report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written form such as displays and other presentations?</li></ul>	
<b>Animals, including humans</b>	
<ul style="list-style-type: none"><li>➤ Can your child describe the changes as humans develop to old age?</li></ul>	
<b>Living things and their habitats</b>	
<ul style="list-style-type: none"><li>➤ Can your child describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird?</li><li>➤ Can your child describe the life process of reproduction in some plants and animals?</li></ul>	
<b>Properties and changes of material</b>	
<ul style="list-style-type: none"><li>➤ Can your child compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets?</li><li>➤ Does your child know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution?</li><li>➤ Can your child use their knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating?</li><li>➤ Can your child give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic?</li><li>➤ Can your child demonstrate that dissolving, mixing and changes of state are reversible changes?</li><li>➤ Can your child explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda?</li></ul>	
<b>Forces</b>	
<ul style="list-style-type: none"><li>➤ Can your child explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object?</li><li>➤ Can your child identify the effects of air resistance, water resistance and friction that act between moving surfaces?</li></ul>	

- Can your child recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect?

### Earth and Space

- Can your child describe the movement of the Earth, and other planets, relative to the Sun in the solar system?
- Can your child describe the movement of the Moon relative to the Earth?
- Can your child describe the Sun, Earth and Moon as approximately spherical bodies?
- Can your child use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky?

### HISTORY

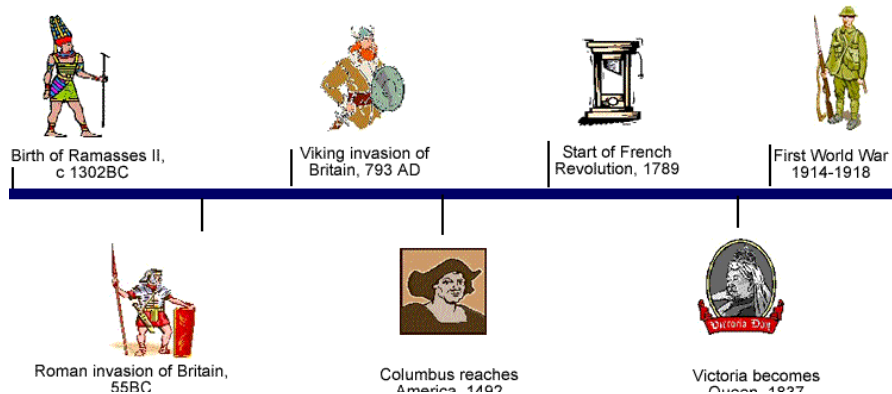
- Can your child draw a timeline with different time periods outlined which shows different information such as periods of history, when famous people lived, etc.?
- Can your child create timelines which outline the development of specific features, such as medicine, weaponry, transport etc.?
- Does your child understand the differences between AD and BC?
- Can your child make comparisons between historical periods, explaining things that have changed and things which have stayed the same?
- Is your child aware of the immigration and emigration which has led to the multi-cultural society of today's UK (eg the development of the British Empire)?
- Does your child have a good understanding as to how a particular theme (eg entertainment, houses and homes or medicine) has changed over the years?
- Can your child investigate how an aspect or theme has changed over time in the local area?



### Examples of additional challenge

- Can your child begin to appreciate that how we make decisions has been through Parliament for some time?
- Does your child appreciate how major events have impacted on British History and life today (eg plagues and the development of sanitation; World Wars and immigration)?
- Can your child debate about an historical issue (eg was the British Empire a good thing?)?

## A Timeline



## GEOGRAPHY

- Does your child have an understanding of the British Isles (ie the physical geography, including its surrounding islands) and the United Kingdom (ie the political geography)?
- Can your child name and locate UK counties, cities and other locations using an atlas, map and digital mapping, with awareness of land-use patterns over time?
- Does your child know the position and significance of latitude and longitude?
- Is your child aware of different time zones?
- Can your child compare a region in the UK with a region in North or South America?
- Does your child show some understanding of human geography (eg economic activity, trade links, distribution of natural resources) and physical geography (eg climate zones, biomes, vegetation belts)?
- Can your child use four and six figure grid references?
- Can your child use fieldwork to answer questions about the local area using a range of methods



### Examples of additional challenge

- Can your child plan a journey to a place in another part of the world, taking account of distance and time?
- Can your child report on ways in which humans have both improved and damaged the environment?
- Can your child begin to recognise the climate for a given country according to its location on the map?

## COMPUTING

- Can your child recognise that different solutions can exist for the same problem?
- Can your child design algorithms that use repetition?
- Can your child begin to work with variables?
- Can your child begin to explore 'what if' questions by planning different scenarios for controlled devices?
- Using logical reasoning, can your child look at an algorithm and make a prediction, explaining why he/she believes something will happen?
- Can your child use logical reasoning to begin to detect errors in increasingly complex algorithms?
- Does your child have a basic understanding of computer networks, including the internet, and the opportunities they offer for communication and collaboration?
- Can your child select, use and combine software on a range of digital devices?
- Can your child use a range of technology for a specific project (eg create and use programs and content)?
- Can your child analyse information?



### E-safety and digital literacy (a guide to these points is included below)

- Can your child use the internet and other technology safely and critically?
- Can your child recognise what is personal information and keep it private?
- Does your child know what to do if they are concerned when they use the internet and other technology?
- Does your child recognise acceptable and unacceptable behaviour when using the internet and other technology?
- Does your child use technology appropriately, effectively and efficiently?

## ART AND DESIGN

- Can your child explore ideas and collect visual and other information to help them develop their work (including experimenting with different artistic styles)?
- Showing increasing knowledge, confidence and experiences, can your child investigate and use a variety of materials and processes (eg drawing, painting, 3D work, collage, printing, e-art, textiles) to communicate ideas and make images / artefacts?
- Can your child combine and organise visual and tactile elements (eg when using colour, shade, pattern, line, texture, form, shape, composition, scale, proportion and tone) to suit their intentions?
- Does your child record their ideas, marks, experiments and examples in a sketch book, adapting and improving what they do?
- Using ideas from the points above, can your child design and make images / artefacts for different purposes?
- Can your child adapt and improve their own work to realise their intentions?
- Can your child comment on similarities and differences between pieces of art, including art from different periods and cultures?
- Does your child show some awareness of design in the world around them eg architecture, graphic design?



## DESIGN AND TECHNOLOGY

- Can your child research design criteria to inform the design of functional, appealing products that are fit for purpose, aimed at a particular audience?
- Can your child generate, develop and communicate their ideas through discussion, annotated sketches and cross-sectional diagrams?
- When making, can your child select from and use a wider range of tools and equipment to perform practical tasks? (eg cutting, shaping, joining, finishing)
- When making, can your child select from and use a wider range of materials and components (including construction materials, textiles and ingredients) according to their functional properties?
- Can your child investigate and analyse existing products?
- Can your child evaluate their ideas and products against their own design criteria and consider the views of others to improve their work?
- Can your child understand how individuals in design and technology have helped make our lives easier?
- Can your child begin to use mechanical systems in their products (eg gears, pulleys, cams, levers and linkages)?
- Can your child begin to apply their understanding of computing to program their products?
- When learning about food and nutrition, can your child show they have knowledge, skills and understanding at an age- appropriate level: diet; food origins; food choice; food labelling; food safety? When preparing and handling food, can your child show they can cut, weigh, measure, bake and use of skills at an age-appropriate level?



## MUSIC

- While performing by ear and from simple notations, can your child maintain their own part?
- Can your child improvise melodic and rhythmic phrases?
- Can your child compose by developing ideas within musical structures?
- Can your child review and evaluate different music, including music from different periods and cultures, with reference to specific musical features eg pitch, tempo, structure?
- Does your child show some awareness of music in the world around them eg advertising, film trailers?
- Can your child contrast the work of famous composers and show preferences?



## FOREIGN LANGUAGES

- Can your child speak and listen effectively in a range of contexts (ie listen attentively with understanding; engage in conversations; speak in sentences; use correct pronunciation)?
- Can your child read carefully and show understanding of words, phrases and simple writing?
- Can your child begin to write with accuracy (ie phrases from memory; adapting phrases to create new meaning; growing awareness of grammar)?
- Does your child appreciate and make links with patterns and sounds in songs and rhymes?
- Can your child broaden their vocabulary and develop their ability to understand new words?



## PERSONAL, SOCIAL, HEALTH, CITIZENSHIP AND ECONOMIC EDUCATION (PSHCE)

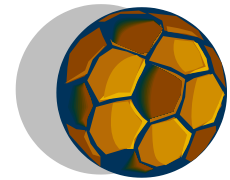
- Can your child discuss some of the bodily and emotional changes at puberty, and can demonstrate some ways of dealing with these in a positive way?
- Can your child talk about a range of jobs, and explain how they will develop skills to work in the future?
- Can your child identify and explain how to manage the risks in different familiar situations (for example, staying safe online)?
- Can your child explain how to stay physically and mentally healthy?
- Can your child understand the risk attached to making choices about healthy lifestyles, personal safety?
- Can your child respond to, or challenge, negative behaviours such as stereotyping and aggression?
- Can your child describe some of the different beliefs and values in society, and can demonstrate respect and tolerance towards people different from themselves?
- Can your child recognise and can discuss the importance of relationships to marriage, parenthood and family life?
- Does your child show an understanding of some citizenship concepts eg rights, responsibilities, rules, right and wrong and fairness?
- Can your child demonstrate a broad knowledge and understanding of the topics and issues they have explored?



- Can your child identify questions, consider and discuss different issues, drawing simple conclusions and justifying personal views and opinions?
- Can your child listen to and consider the views and experiences of others and can express views that are not necessarily their own?
- Can your child communicate their findings and experiences with others and reflect on these by making suggestions for improvements or changes?

### PHYSICAL EDUCATION (PE)

- Can your child perform to an accompaniment expressively?
- Does your child show clarity, fluency, accuracy and consistency?
- Can your child independently combine and perform actions, shapes and balances?
- Can your child create more complex sequences that demonstrate control, agility and flexibility?
- Is your child beginning to consistently select the right shots or tactics to be successful in a game?
- Can your child use a variety of techniques to pass, dribble, shoot and hit?
- Is your child able to say why activity is good for health, fitness and well-being?
- Can your child warm up independently?
- Does your child use appropriate words when evaluating and improving own and others' work?



### RELIGIOUS EDUCATION

- Based on the Cornwall Agreed Syllabus and the main ethnic groups in the area around the academy
- Can your child describe and understand links between a range of stories and other aspects of religions and communities, responding thoughtfully?
- Can your child describe and make connections between different features of the religions and other world views?
- Can your child observe and understand varied examples of religions and other world views so they can explain their meanings and significance for the choices people make?
- Can your child discuss and present thoughtfully views on questions about belonging, meaning, purpose, truth?
- Does your child discuss and respond to ethical questions, with some consideration, including what is right and wrong, just and fair?
- Can your child consider ideas about ways in which diverse communities can live together for the wellbeing of all, responding to ideas about community, values and respect?



### E-SAFETY AND DIGITAL LITERACY

Parents / carers should support their child to be safe when using technology, whether computers, tablets, phones or gaming devices.

- Can your child use the internet and other technology safely and critically?
- Can your child understand how search results are selected and ranked?
- Can your child competently use the internet as a search tool?
- Can your child recognise that information on the internet may not be accurate or reliable and

may be used for bias, manipulation or persuasion (eg wikis, blogs)?

- Can your child recognise why people may publish content that is not accurate and understand the need to be critical evaluators of content?
- Does your child understand that the outcome of internet searches at home may be different than at school?
- Does your child understand that some websites and/or pop-ups have commercial interests that may affect the way the information is presented?
- Can your child recognise the potential risks of using internet communication tools and understand how to minimise those risks (including scams and phishing)?
- Can your child use knowledge of the meaning of different domain names and common website extensions (eg .co.uk; .com; .ac; .sch; .org; .gov; .net) to support validation of information?
- Does your child know the difference between online communication tools used in school and those used at home?
- Can your child use appropriate strategies for finding, critically evaluating, validating and verifying information? Eg using different keywords, skim reading to check relevance of information, cross checking with different websites or other non ICT resources?



### **Can your child recognise what is personal information and keep it private?**

- Does your child understand that if they make personal information available online it may be seen and used by others and is extremely difficult to remove?
- Does your child understand the benefits of developing a 'nickname' for online use? Does your child understand that some malicious adults may use various techniques to make contact and elicit personal information?
- Does your child know that content put online is extremely difficult to remove?
- Does your child understand they should not publish other people's pictures or tag them on the internet without permission?
- Does your child understand that online environments have security settings, which can be altered, to protect the user?
- Can your child recognise what is personal information and keep it private?
- Can your child create strong passwords and manage them so that they remain strong?

### **Does your child know what to do if they are concerned when they use the internet and other technology?**

- Does your child know how to report an incident of cyber-bullying?
- Can your child identify when emails should not be opened and when an attachment may not be safe?
- Does your child understand that some messages may be malicious and know how to deal with this?
- Does your child understand the need for caution when using an internet search for images and what to do if they find an unsuitable image?
- Does your child know what to do if they discover something suspicious, malicious or inappropriate?

### **Does your child recognise acceptable and unacceptable behaviour when using the internet and other technology?**

- Does your child understand the need for rules to keep them safe when exchanging learning and ideas online?
- Does your child recognise that cyber-bullying is unacceptable?
- Can your child use technology in ways which minimises risk eg responsible use of online discussions, etc?
- Does your child know how to respond if asked for personal information or feel unsafe about

content of a message?

- Does your child know that it is unsafe to arrange to meet unknown people met online?
- Can your child reference information sources?
- Can your child recognise the difference between the work of others which has been copied (plagiarism) and re-structuring and re-presenting materials in ways which are unique and new?
- Does your child understand that copyright exists on most digital images, video and recorded music?
- Does your child use technology appropriately, effectively and efficiently?
- Can your child discuss the positive and negative impact of ICT use in theirs and their friends' and family's lives?
- Can your child explain and demonstrate how to use email safely?
- Does your child understand that some material on the internet is copyrighted and may not be copied or downloaded?
- Can your child independently, and with regard for e-safety, select and use appropriate communication tools to solve problems by collaborating and communicating with others within and beyond school?