Bruche Primary School
Academy & WPAT Curriculum

Manual of Instructions and Subject Policies

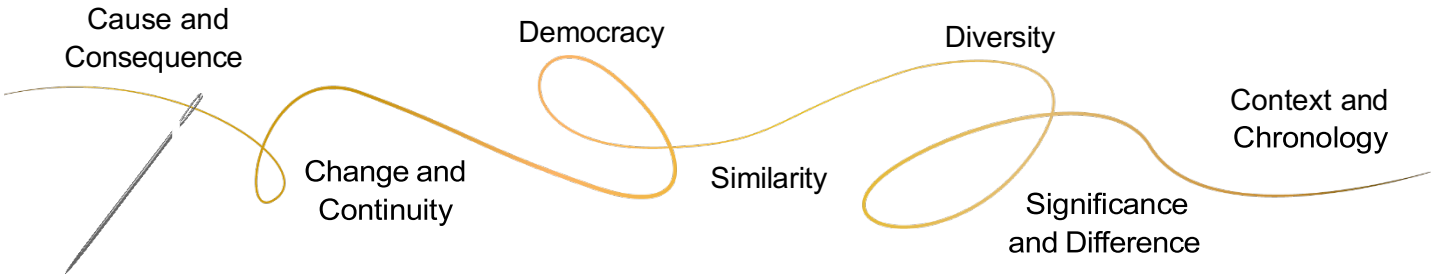
with Career Pathways

CONTENTS

CURRICULUM OVERVIEW

We have built a knowledge rich and humanity rich curriculum.

With this mastery principle in mind, we have woven our areas of learning into a **'Curriculum Story'** for each year group from Year 1 to 6, with an 'eye on' Year 7. This gives all learning a meaningful context; learning flows from one topic to another through conceptual awareness and understanding.



The Curriculum at Bruche gives children opportunities to learn, build on and develop new skills, concepts and knowledge. Children experience a wide range of subjects and activities that allow them to explore different topics and learning styles in detail. There are three pillars that uphold our entire curriculum:

CAREERS PATHWAY

WHY WARRINGTON

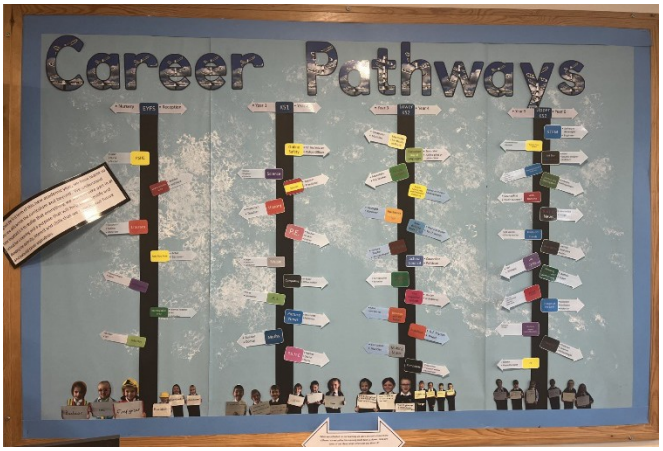
GLOBAL DIMENSIONS

Bruche promotes a curriculum that is infused by **British values** and the spiritual, moral, social and cultural development of its children. Our belief is that all our children can achieve highly and that we will provide the right learning experiences for this to happen. Learning is our core purpose and we are committed to building children's capacity to develop as independent, confident and reflective learners. In order to do this, we have designed a progressive knowledge rich curriculum, formed from evidential research. We bring together the delivery of knowledge through cognitive science approaches such as retrieval and metacognition.

For our full Curriculum Policy please see our website.

CAREER PATHWAYS - The World of Employment

At Bruche, we inspire our children to think about their future and the prospects of professional life. Through our careers-based learning approach, all children develop their cultural and identity capital. We encourage children to invest in their interests and really think about what their career aspirations are.



We are committed to ensuring that all our pupils, from Nursery to Year 6, have high quality experiences in career opportunities and the best careers education possible. With this, we can improve their motivation so that, by the time they enter Year 11 in Kings Leadership Academy, Birchwood High School or Sir Thomas Boteler High School, they are much more ready to continue to follow their aspirations in the World of Employment.

This Manual of Instructions acts as a tool for teachers to incorporate careers through the breadth of the curriculum. Using this Manual, teachers talk to children about how their learning is relevant to the World of Employment and their future studies. Conversations revolve around:

- The leading universities for specific subjects,
- Careers that could be entered with the knowledge gained from certain subjects,
- Companies that offer jobs within different fields, and
- Famous people that have already accomplished a degree within a range of areas.

These conversations help to build the foundations of our children's goals for the future and open their minds to a world of opportunities. Therefore, it is incredibly important that such discussions are frequently and seamlessly used throughout the entirety of our curriculum.

All students will be entitled to a World of Work Programme that:

- Supports the academy's mission of enhancing the future social mobility of all students, irrespective of educational starting points, ethnicity, family background, disability or postcode by providing good quality independent careers advice and personal guidance which inspires them, meets their need and motivates them to fulfil their potential.
- Is based on the 8 Gatsby Benchmarks for good Careers Information Advice and Educational Guidance (CIAEG) – *Please see Appendix 4.*
- Inspires them to develop high aspirations and consider a broad and ambitious range of future career opportunities regardless of gender, ability or social background.

Please see Appendix 5 for Examples of how Mathematics skills link with Careers.

English

Nursery: Available in continuous provision every day
Reception: Available in continuous provision every day
Year 1: 5 phonics lessons a week, guided reading
Year 2: 5 lessons a week (5 hours) are dedicated to English lessons. Shared reading sessions
KS2: 5 lessons a week (5 hours) are dedicated to English lessons. Shared reading sessions

What skills, aims and interests are needed to be successful for this subject?

- Reading skills: Comprehension, critical reading, analysis, summary and synthesis.
- Writing skills: Creative, imaginative and writing to present a viewpoint.
- Spoken Language: Presentational and speaking skills.

What will I study?

- Pupils will read high quality, challenging texts.
- The text types will include **literature**, **literary non-fiction** and other **non-fiction writing** such as reports, reviews and journalism (both printed and online).
- Basic literacy skills (spelling, punctuation, grammar).
- Delivering formal presentations and holding interesting discussions.

How will English be assessed?

- For all year groups moderation of writing will take place partnered with another colleague (in school and across WPAT).
- NFER reading tests to be completed across year groups. Shared reading lessons will assess pupils understanding.
- Grammar and spelling tests in class.

Homework/Independent Learning and Extended Learning:

- Use of personal reading libraries ensuring a wide variety of texts; Independent reading book, challenge book and non-fiction book.
- Reading comprehension tasks.
- Producing pieces of writing.
- Preparation and practice for speaking and listening tasks.

How would I use this subject in the future?

- English is a critical subject into higher education, working life, and provides pupils with essential communication skills.
- Pupils will go on to study English at High School (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below).

What are the top 5 universities currently for this subject?	**Jobs you could do with a English degree**
1. Durham **2. University College London** **3. Cambridge** **4. St Andrews** **5. Bristol**	**1. Journalism** **2. English teacher** **3. Freelance Writer** **4. Social media manager** **5. Lawyer** **6. Librarian**
Companies you could work for include; • **Sky** • **ITV** • **Warrington Guardian** • **Government Ministry of Justice** • **Pearson**	**Famous people who have studied this subject at university;** • **Emma Watson** • **Stephen Fry** • **Steven Spielberg** • **Stephen King**

We currently hold the Primary Quality Mark for English.

Mathematics
Nursery: Available in continuous provision every day Reception: Available in continuous provision every day KS1: 5 lessons a week (5 hours) + Multiplication tables KS2: 5 lessons a week (5 hours) + Multiplication tables
What skills, aims and interests are needed to be successful for this subject? • Be **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. • **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language • **Solve problems** by applying their mathematics to a variety of routine and non- routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.
What will I study? • Number • Measurement • Geometry • Statistics • Algebra • Ratio and Proportion
How will Mathematics be assessed? • For 3, 4, 5 year groups termly NFER tests will be used. Year 2 and Year 6 will complete statutory tests in the summer term and will use past tests as practice materials. • Times tables will be learnt across school (see appendix 1) in a statutory sequence • Assessment grids in pupil's books will be used to track attainment and progress every two weeks. • Outcomes will be analysed through book scrutiny by teachers, teaching assistants, partnering up with other teachers across WPAT for standardization and moderation • Feed forward marking will be used to challenge and deepen learning. Target setting will come through everyday feed forward marking (Every piece of work can be improved) No static targets will be set. • Retrieval activities will be completed throughout the year for short and long term memory. • *See Appendix 1 for the Teaching of Multiplication Tables* **Homework/Independent Learning and Extended Learning:** • Homework is set every week and consists of practice papers, mathematical problem solving and challenges. Consolidation activities may also be given when appropriate. • TT rock stars may also be used to help extend home learning or revision periods for Times tables. • Revision materials will be provided by the school in the form of practice papers, videos and revision booklets (Year 6). Revision booklets will not be given to Year 2 children.

How would I use this subject in the future?

- Mathematics is an essential qualification when you go on to study the subject further at (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below). Mathematics is also an essential qualification for life. Number skills are required in almost all everyday situations, such as working out bills, calculating your salary, shopping, dealing with mortgages and investments. Thinking like a mathematician will help to improve your problem-solving and decision-making skills.

What are the top 5 universities currently for this subject? **1. Cambridge** **2. Oxford** **3. Imperial College London** **4. St Andrews** **5. Warwick**	**Jobs you could do with a Mathematics degree** **1. Research** **2. Medicine** **3. Teaching** **4. Design and Architecture** **5. Computer Gaming** **6. Accountancy** **7. Science & Engineering** **8. Sport Science** **9. Intelligence Analyst**
Companies you could work for include; • **Royal Navy** • **Deloitte** • **Allianz Insurance** • **MI5** • **EA Sports** • **Sky Sports**	**Famous people who have studied this subject at university;** • **Christopher Wren** • **Marie Curie** • **William Gladstone** • **Lewis Carroll** • **Michael Jordan** • **Rowan Atkinson**

We currently hold the Primary Quality Mark for Mathematics

Science	
Nursery: Available in continuous provision every day Reception: Available in continuous provision every day KS1: 1 hour 45 minutes a week KS2: 2 hours a week	
What skills, aims and interests are needed to be successful for this subject? • Have scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. • Be understanding of the nature, processes and methods of science through different types of science enquiries that help you to answer scientific questions about the world around you. • Be equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.	
What will I study? All year groups will 'Work Scientifically' **EYFS will study;** **Understanding the World — The Natural World:** Explore the natural world around them, making observations and drawing pictures of animals and plants; Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class; Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. **Continuous provision:** Water tray (floating, sinking, absorbency of materials) Sand tray/pit (consistency of materials, role play) Bug hunts (mats/logs to turn over, wild flowers and long grass) Construction area (junk modelling, different types of materials) Growing area (seeds, plants, minibeasts) Mud kitchen (consistency of materials, scented herbs, stones, minibeasts) Sound (musical instruments and sound) Small world (different animals, props, dolls' house) Playdough area (birthday props/cake decorations to encourage talk about changing and growing)	**KS2 will study;** Plants Animals, including humans (Years 3, 4, 5,6) Rocks Light (Years 3 and 6) Forces and magnets (Years 3 and 5) Living things and their habitats (Years 4, 5, 6) States of matter Sound Electricity (Years 2, 4 and 6) Properties and changes of materials Earth and space Evolution and inheritance

KS1 will study;

Plants (Years 1 and 2)
Animals, including humans (Years 1 and 2)
Everyday materials
Seasonal changes
Living things and their habitats (Year 2)
Uses of everyday materials (Year 2)

How will Science be assessed?

- Retrieval activities will be used to assess what pupils can remember
- Outcomes will be analysed through book scrutiny by teachers, teaching assistants, partnering up with other teachers across WPAT for standardization and moderation
- Feed forward marking will be used to challenge and deepen learning. Target setting will come through everyday feed forward marking (Every piece of work can be improved)
- Pupils will be asked to predict and reflect on their scientific observations.

Homework/Independent Learning and Extended Learning:

- Children have access to science enrichment activities during lunch time for pupil's to continue working scientifically outside.
- Science videos and clips are also available for every topic which allows pupils to study at home and are suited to IOS and Android devices. These are emailed out to all pupils when the topic is being covered.

How would I use this subject in the future?

- Good grades in science is an essential qualification and you will go on to study the subject further at (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below). The main skills you will utilise from achieving a science degree are, Problem solving skills, Organisational skills, Project management, Practical skills, Mathematical skills, Analytical skills, Time management, Research skills and an ability to communicate information effectively.

What are the top 5 universities currently for this subject?

1. **Cambridge**
2. **Oxford**
3. **Durham**
4. **Imperial College London**
5. **Edinburgh**

Jobs you could do with a Science degree

1. **Health sciences (doctor, nurse, sports physiotherapist)**
2. **Engineering (aerospace engineer, robotics engineer, architect)**
3. **Life sciences (veterinarian, dentist, marine biologist)**
4. **Physical sciences (pilot, forensic science, geoscientist)**
5. **Science Teacher**
6. **Forensic Scientist**
7. **Environmental consultancy**

Companies you could work for include;

- **AstraZeneca**
- **Alder Hey Hospital**
- **Cheshire Police – CSI**
- **Microsoft**
- **Universal Robots**

Famous people who have studied this subject at university;

- **David Attenborough**
- **Brian Cox**
- **Jonathan Van-Tam**
- **Dr Catherine Green**
- **Professor Sarah Gilbert**
- **Rosalind Franklin**

We currently hold the Primary Quality Mark for Science

Spanish
Nursery: 10 minutes a week Reception: 20 minutes a week KS1: 25 minutes a week KS2: 45 minutes a week
What skills, aims and interests are needed to be successful for this subject? • To understand and respond to spoken and written language from a variety of authentic sources. • To speak with increasing confidence, fluency and spontaneity, finding ways of communicating what you want to say, including through discussion and asking questions, and continually improving the accuracy of your pronunciation and intonation • Be able to write at varying length, for different purposes and audiences, using the variety of grammatical structures that you have learnt • To discover and develop an appreciation of a range of writing in the language studied.
What will I study? • To listen attentively to spoken language and show understanding by joining in and responding • To explore the patterns and sounds of language through songs and rhymes and link the spell, sound and meaning of words • To engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help • To speak in sentences, using familiar vocabulary, phrases and basic language structures • To develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases • To present ideas and information orally to a range of audiences • To read carefully and show understanding of words, phrases and simple writing • To appreciate stories, songs, poems and rhymes in the language • To broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary • To write phrases from memory, and adapt these to create new sentences, to express ideas clearly • To describe people, places, things and actions orally and in writing • To understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English.
How will Spanish be assessed? • Spanish will be taught and assessed in every year group from Nursery to Year 6 using benchmark descriptors and tracking grids. The expertise of our Spanish teacher will be used to support in these assessments. **Homework/Independent Learning and Extended Learning:** • Pupils in KS1 and KS2 will use Language Explorers (JLN), where pupils will revise a list of vocabulary relating to the topic being taught. In KS2 pupils will complete a piece of either spoken or written work based on the content they are learning. • Independent learning will be facilitated using Click2Teach through the school week.

How would I use this subject in the future?

- Good grades in Spanish is an essential qualification if you are planning to go onto study the subject further at (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below). The study of one language at High school can facilitate and help promote the learning of other languages. Pupils may need a GCSE in a language when applying to certain universities. A language qualification may also add to your employability profile with over 1/3 of businesses wanting people specifically for their language skills.

What are the top 5 universities currently for this subject?	Jobs you could do with a Spanish degree
1. Durham 2. Cambridge 3. St Andrews 4. Oxford 5. Southampton	1. Translator/Interpreter 2. Foreign Service Officer 3. International Lawyer 4. Overseas Journalist 5. Pilot 6. Fashion Designer 7. Immigration/Customs Official 8. Export/Import Business Manager
Companies you could work for include; • International aid worker • BBC • Sky • UK Government - Foreign Office • UK Government - Home Office	**Famous people who have studied languages at university;** • Chris Martin • Paula Radcliffe • Mark Zuckerberg • Novak Djokovic • Ellen MacArthur

We currently hold the Primary Connecting Classrooms International Award and Primary Languages Award

Geography

Nursery: Available in continuous provision every day
Reception: Available in continuous provision every day
KS1: 1 hour a week
KS2: 1 hour a week

What skills, aims and interests are needed to be successful for this subject?

- Develop contextual knowledge of the location of globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes
- Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time
- Are competent in the geographical skills needed to:
    - collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes
    - interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS)
    - Communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing at length.

What will I study?

- Pupils will develop knowledge about the world, the United Kingdom and their locality. They will understand basic subject-specific vocabulary relating to human and physical geography and begin to use geographical skills, including first-hand observation, to enhance their locational awareness.
- Pupils will extend their knowledge and understanding beyond the local area to include the United Kingdom and Europe, North and South America. This will include the location and characteristics of a range of the world's most significant human and physical features. They will develop their use of geographical knowledge, understanding and skills to enhance their locational and place knowledge.

How will Geography be assessed?

- We are members of the Geography Association and use their quality resources to support the assessment of Geography.
- **Through Active geography:** pupils will DO geography, rather than just listen to it, by being engaged in practical activities in and beyond the classroom.
- **Geographical voice:** pupils will have ample opportunity to engage in discussion, debate and oral presentation, rather than just writing about the geography they are doing (so that it is geographical knowledge and understanding, not literacy, that is being assessed).
- Retrieval activities will be used to assess what pupils can remember
- Feed forward marking will be used to challenge and deepen learning. Target setting will come through everyday feed forward marking (Every piece of work can be improved)

Homework/Independent Learning and Extended Learning:

- When Geography homework is set it will be;
- Inclusive so it encourages pupils to be creative and think independently about geography and what it means to them, and
- Meaningful so it is clearly linked to what pupils are learning in later lessons or consolidates previous learning.

How would I use this subject in the future?

- Good grades in Geography is an essential qualification if you are planning to go onto study the subject further at (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below). Geography is one of the most exciting, adventurous and valuable subjects you can study. It helps you to make sense of our changing world and places around you, meaning it is always up-to-date and relevant. Many of the world's current challenges are related to geography, and require the skills and insight from the geographers of the future to help us to understand them

What are the top 5 universities currently for this subject?	**Jobs you could do with a Geography degree**
1. Durham **2. Cambridge** **3. St Andrews** **4. Oxford** **5. Southampton**	**1. Accountancy** **2. Market research** **3. Management consultancy** **4. Aid work** **5. Landscape architecture** **6. Field studies work** **7. Environmental consultancy** **8. Civil engineering** **9. Cartography** **10. Surveying** **11. Town planning** **12. Teaching** **13. The tourist industry**
Companies you could work for include; • **Ordnance Survey** • **Department for Environmental Food & Rural Affairs** • **The Wildlife Trusts** • **British Army** • **Travel reporter**	**Famous people who have studied languages at university;** • **Prince William, Prince of Wales** • **Theresa May** • **Michael Palin** • **Milton Almeida dos Santos** • **Alexander von Humboldt**

We currently hold the Primary Quality Mark for Geography

History
Nursery: Available in continuous provision every day Reception: Available in continuous provision every day KS1: 1 hour a week KS2: 1 hour week
What skills, aims and interests are needed to be successful for this subject? • Know and understand the history of these islands as a coherent, chronological narrative, from the earliest times to the present day: how people's lives have shaped This nation and how Britain has influenced and been influenced by the wider world Know and understand significant aspects of the history of the wider world: the nature of ancient civilisations; the expansion and dissolution of empires; characteristic features of past non-European societies; achievements and follies of mankind • Gain and deploy a historically grounded understanding of abstract terms such as 'empire', 'civilisation', 'parliament' and 'peasantry' • Understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically-valid questions and create their own structured accounts, including written narratives and analyses • Understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed • Gain historical perspective by placing their growing knowledge into different contexts, understanding the connections between local, regional, national and international history; between cultural, economic, military, political, religious and social history; and between short- and long-term timescales.
What will I study? • Pupils will develop an awareness of the past, using common words and phrases relating to the passing of time. They will know where the people and events they study fit within a chronological framework and identify similarities and differences between ways of life in different periods. They will use a wide vocabulary of everyday historical terms. They will also ask and answer questions, choosing and using parts of stories and other sources to show that they know and understand key features of events. They will understand some of the ways in which we find out about the past and identify different ways in which it is represented. • Pupils will develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They will note connections, contrasts and trends over time and develop the appropriate use of historical terms. They will also regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They will construct informed responses that involve thoughtful selection and organisation of relevant historical information. Children will understand how our knowledge of the past is constructed from a range of sources.
How will History be assessed? • We are members of the History Association and use their quality resources to support the assessment of History. • Retrieval activities will be used to assess what pupils can remember • Feed forward marking will be used to challenge and deepen learning. Target setting will

come through everyday feed forward marking (Every piece of work can be improved)

- We will use quality questioning both to assess and to advance children's learning. We will actively involve all children in their own learning through, for instance, discussion and debate with peers and teacher; assessing, reviewing and reflecting on their own Historical performance.

Homework/Independent Learning and Extended Learning:

When we set homework for History it will facilitate;

- Progression in children's depth of understanding in history
- Progression in the key concepts relating to history
- Progression in children's independent research skills

How would I use this subject in the future?

- Good grades in History is an essential qualification if you are planning to go onto study the subject further at (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below). History will help to accelerate progress in English, as well as the other Humanities subjects. The ability to think critically and provoke questioning of events both past and present is a life skill of premium importance.

What are the top 5 universities currently for this subject?	Jobs you could do with a History degree
1. Durham 2. Cambridge 3. Oxford 4. St Andrews 5. London School of Economics	1. Academic librarian 2. Archaeologist 3. Museum/gallery curator 4. Historian 5. Genealogist 6. History teacher 7. Underwater archaeologist 8. Writer and editor 9. Conservator
Companies you could work for include; • The British Museum • English Heritage • The National Archives • The National Trust • Harvard University	**Famous people who have studied this subject at university;** • Joe Biden • Winston Churchill • Anita Roddick • Lord Sebastian Coe • Lauryn Hill

We are currently working towards achieving Primary Quality Mark for History

Music
Nursery: Available in continuous provision every day Reception: Available in continuous provision every day KS1: 40 minutes + 25 minutes singing a week KS2: 40 minutes + 25 minutes singing a week
What skills, aims and interests are needed to be successful for this subject? • Perform, listen to, review and evaluate music across a range of historical periods, genres, styles and traditions, including the works of the great composers and musicians • Learn to sing and to use their voices, to create and compose music on their own and with others, have the opportunity to learn a musical instrument, use technology appropriately and have the opportunity to progress to the next level of musical excellence • Understand and explore how music is created, produced and communicated, including through the inter-related dimensions: pitch, duration, dynamics, tempo, timbre, texture, structure and appropriate musical notations.
What will I study? • Use their voices expressively and creatively by singing songs and speaking chants and rhymes • Play tuned and untuned instruments musically • Listen with concentration and understanding to a range of high-quality live and recorded music • Experiment with, create, select and combine sounds using the inter-related dimensions of music. • Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression • Improvise and compose music for a range of purposes using the inter-related dimensions of music • Listen with attention to detail and recall sounds with increasing aural memory • Use and understand staff and other musical notations • Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians • Develop an understanding of the history of music.
How will Music be assessed? • Retrieval activities will be used to assess what pupils can remember • We will use Music Mark assessment tasks • A collection of video and/or audio files will be recorded to be compared to show progress over time. **Independent Learning and Extended Learning:** • School offer 1:1 tuition in a range of instruments including guitar, keyboard and piano. • Our school choir (open to all pupils) sing regularly at community events across Warrington. • Each year our school choir participate in the Warrington Primary Arts Network performance at the Parr Hall with fifty other schools. Rehearsals and performances are conducted after school. • Every week the whole school take part in singing practise with our specialist music teacher.

How would I use this subject in the future?

- Good grades in music is an essential qualification if you are planning to go onto study the subject further at (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below). Music is an academic subject, and colleges and universities look on it very favourably. This qualification shows you are creative, dedicated and can work with other people. These are all skills that are very sought after by employers.

What are the top 5 universities currently for this subject?	Jobs you could do with a Music degree
1. Oxford 2. Leeds 3. Durham 4. Cambridge 5. Birmingham	1. Performer 2. Music Education (e.g. teacher or Tutor) 3. Arts Administration 4. Theatre work 5. A&R, Promotion & Booking 6. Artist Management 7. Music Producer 8. Producer 9. DJ 10. Marketing Executive 11. Radio work
Companies you could work for include; • Royal Opera House • Universal Music Group (UMG) • Amazon Studios • Radio 1 • Wire FM	**Famous people who have studied this subject at university;** • Ed Sheeran • Jamie Foxx • Andrew Lloyd Webber • Sir Elton John • Adele

We currently hold the Music Mark which recognises high quality music education in school. We are also a Music Ambassador School.

Physical Education (PE)

Nursery: Available in continuous provision every day
Reception: Available in continuous provision every day
KS1: 2 hours a week
KS2: 2 hours a week

What skills, aims and interests are needed to be successful for this subject?

- Develop competence to excel in a broad range of physical activities
- Are physically active for sustained periods of time
- Engage in competitive sports and activities
- Lead healthy, active lives.

What will I study?

- Master basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activities
- Participate in team games, developing simple tactics for attacking and defending
- Perform dances using simple movement patterns.
- Use running, jumping, throwing and catching in isolation and in combination
- Play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounder's and tennis], and apply basic principles suitable for attacking and defending
- Develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]
- Perform dances using a range of movement patterns
- Take part in outdoor and adventurous activity challenges both individually and within a team
- Compare their performances with previous ones and demonstrate improvement to achieve their personal best.
- Swim competently, confidently and proficiently over a distance of at least 25 metres
- Use a range of strokes effectively [for example, front crawl, backstroke and breaststroke]
- Perform safe self-rescue in different water-based situations.

How will PE be assessed?

- Using our chosen tracking software we assess children on three key domains, Performance (Skill based) Personal/social (Knowledge based) Competition- Self and against others (Resilience based).
- We assess against a list of skills, knowledge and behaviours which form into our robust and concise end points for each Key stage.
- AFL strategies are in place and are tracked topic by topic.
- Summative assessments are collated at the end of each term, these are then combined with the curriculums outcomes and are averaged into an overall score which is shared with the PE Lead, Class teacher and SLT.
- Evidence is collected through pictures, videos and pupil conferences this is then stored on our tracking system.

Independent Learning and Extended Learning:

- A range of after school clubs are available to all children including Jujitsu, Multi skills, football and rugby.
- School has a very successful football team who play in competitions and matches against schools from across Warrington.
- School own a swimming pool – each year deliver curriculum swimming to all children from Year 1 to Year 6. Children can also access the pool after school for top up lessons which will improve their swimming ability.
- School have excellent links with community sports clubs which many of our children take part in.
- We have exercise equipment on our school playground for all children to access.

How would I use this subject in the future?

- Good grades in PE is an essential qualification if you are planning to go onto study the subject further at (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below). This subject will help anyone interested in working in the sports industry.

What are the top 5 universities currently for this subject?

1. **Durham**
2. **Birmingham**
3. **Bath**
4. **Exeter**
5. **Loughborough**

Jobs you could do with a PE degree

1. **Physiotherapist**
2. **Sports psychologist**
3. **PE teacher**
4. **Sports coach**
5. **Personal trainer**
6. **Sports Nutritionist**
7. **Performance coaches.**

Companies you could work for include;

- **Manchester United (Manchester)**
- **Barcelona Football Club (Spain)**
- **Set up your own fitness company**
- **Warrington Hospital (NHS)**
- **Royal Air Force**
- **Bupa**

Famous people who have studied this subject at university;

- **Victoria Pendleton**
- **John McFall**
- **José Mourinho**
- **Peter Phillips - member of the British Royal Family**
- **Kate Howey MBE**

We are currently hold the afPE Quality Mark for PE and the Gill Parry Best Practice Award

Art and Design
Nursery: Available in continuous provision every day Reception: Available in continuous provision every day KS1: 24 hours + 6 hours PAN a year KS2: 24 hours + 6 hours PAN a year
What skills, aims and interests are needed to be successful for this subject? • Produce creative work, exploring their ideas and recording their experiences • Become proficient in drawing, painting, sculpture and other art, craft and design techniques • Evaluate and analyse creative works using the language of art, craft and design • Know about great artists, craft makers and designers, and understand the historical and • Cultural development of their art forms.
What will I study? • To use a range of materials creatively to design and make products • To use drawing, painting and sculpture to develop and share their ideas, experiences and imagination • To develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space • About the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work. • To create sketch books to record their observations and use them to review and revisit ideas • To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] • About great artists, architects and designers in history.
How will Art and Design be assessed? • Retrieval activities will be used to assess what pupils can remember • Feed forward marking will be used to challenge and deepen learning. Target setting will come through everyday feed forward marking (Every piece of work can be improved) • We will use quality questioning both to assess and to advance children's learning. We will actively involve all children in their own learning through, for instance, discussion and debate with peers and teacher; assessing, reviewing and reflecting on their own artistic performance. **Independent Learning and Extended Learning:** • Pupils can join an extra-curricular Art session in order to develop ideas to the highest of standards. Sketchbook development is a crucial part of pupils learning. Our dinnertime enrichment programme will involve first-hand drawings, Painting, sculpture, collage and textiles and researching Artists and further practice of techniques taught in class. We
How would I use this subject in the future? • Good grades in Art is an essential qualification if you are planning to go onto study the subject further at (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below). Creative young people with artistic flair will always be in demand and there are many employment opportunities available.

What are the top 5 universities currently for this subject? 1. Cambridge 2. Oxford 3. University College London 4. University of Edinburgh 5. King's College London	**Jobs you could do with an Art and Design degree** 1. Artist 2. Teacher 3. Designer (Product, Fashion, Graphic, Shoe, Games) 4. Architect 5. Sculptor 6. Makeup Artist 7. Photographer
Companies you could work for include; • BBC • The National Gallery • AMV BBDO • Gucci • Burberry • ITV • Sky	**Famous people who have studied this subject at university;** • John Lennon • Tracey Emin • Quentin Blake • Marc Jacobs • Calvin Klein
We are currently working towards achieving the Arts Mark	

Computing
Nursery: Available in continuous provision every day Reception: Available in continuous provision every day KS1: 1 hour a week KS2: 1 hour a week
What skills, aims and interests are needed to be successful for this subject? • Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation • Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems • Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems • Are responsible, competent, confident and creative users of information and communication technology.
What will I study? • Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions • Create and debug simple programs • Use logical reasoning to predict the behaviour of simple programs • Use technology purposefully to create, organise, store, manipulate and retrieve digital content • Recognise common uses of information technology beyond school • Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies • Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • Use sequence, selection, and repetition in programs; work with variables and various forms of input and output • Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration • Use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content • Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
How will Computing be assessed? • Retrieval activities will be used to assess what pupils can remember • We are members of The NCCE (National Centre for Computing Education) which will also be used to support the assessment of pupil's attainment and progress in computing.

- We will use quality questioning both to assess and to advance children's learning. We will actively involve all children in their own learning through, for instance, discussion and debate with peers and teacher; assessing, reviewing and reflecting on their own computing performance.

Independent Learning and Extended Learning:

- Working with the National Centre for Computing Education (NCCE) we offer high-quality computing activities for pupils of all ages, which can be scheduled by teachers and parents. A timetable of sequential, topic-led activities.

How would I use this subject in the future?

- Good grades in computing is an essential qualification if you are planning to go onto study the subject further at (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below).

What are the top 5 universities currently for this subject? 1. **Cambridge** 2. **Imperial College London** 3. **Oxford** 4. **St Andrews** 5. **Bristol**	**Jobs you could do with a Computing degree** 1. **Software Developer** 2. **Games Developer** 3. **Computer Technician** 4. **IT Consultant** 5. **Database, Network or Systems Administrator**
Companies you could work for include; • **Google** • **Apple** • **Microsoft** • **Nintendo** • **Virgin Media/ Sky** • **Beats Electronics**	**Famous people who have studied this subject at university;** • **Mark Zuckerberg** • **Anita Borg** • **Will.i.am** • **Bill Gates** • **Andre Young**

We are currently working towards achieving the NCCE Quality Mark

Personal, Social, Health and Economic Education (PSHE), Relationships and Health Education (RHE)

Nursery: Available in continuous provision every day
Reception: Available in continuous provision every day
KS1: 30 minutes a week (to include RHE)
KS2: 30 minutes a week (to include RHE)

What skills, aims and interests are needed to be successful for this subject?

During key stages 1 and 2, our PSHE education offers both explicit and implicit learning opportunities and experiences which reflect pupils' increasing independence and physical and social awareness, as they move through our school. It builds on the skills that pupils started to acquire during the Early Years Foundation stage (EYFS) to develop effective relationships, assume greater personal responsibility and manage personal safety, including online. PSHE education helps our pupils to manage the physical and emotional changes at puberty, introduces them to a wider world and enables them to make an active contribution to their communities.

What will I study?

Core theme one: Health and wellbeing
Core theme one: Relationships
Core theme one: Living in the Wider World

Our Programme of Study sets out learning opportunities for each key stage, in each core theme, organised under subheadings. These learning opportunities are used flexibly to plan our programme according to pupils' development, readiness and needs, and taking into account prior learning, experience and understanding. Learning from one area may be related and relevant to others. Whilst our framework distinguishes three separate core themes, there will be extensive overlap, so when planning our units, we may draw from more than one theme. For example, Relationships and Health Education (RHE) falls within both 'Health and Wellbeing' and 'Relationships', as health should always be considered as an element of health education but also taught within the context of healthy relationships. Similarly, whilst they are specifically addressed where appropriate, assessing and managing risk and managing life online are integrated throughout all three core themes. Our PSHE education addresses both pupils' current experiences and preparation for their future. Our Programme of Study therefore provides a spiral curriculum to develop knowledge, skills and attributes, where prior learning is revisited, reinforced and extended year on year. This is grounded in the established evidence base for effective practice in PSHE education.

Our Programme of Study identifies a broad range of important issues, but we prioritise quality over quantity (so that our PSHE lessons are not simply a series of one-off, disconnected sessions) whilst ensuring that our programme reflects the universal needs of all pupils as well as the specific needs of the pupils in your school or community. When planning and ordering topic areas for our pupils, we start with identifying their needs. We ensure our pupils recognise their PSHE education is relevant and applicable across many important areas of their lives. Unlike many other subjects, much of the specific knowledge taught in our PSHE lessons changes regularly, for example as a result of legal changes, medical or technological advances. We therefore recognise it is important to ensure that all information used to develop pupils' knowledge on any aspect of our PSHE education is up to date, accurate, unbiased and balanced.

How will PSHE and RHE be assessed?

- Pupils will have opportunities to reflect on their learning and its implications for their lives.
- We will use baseline assessments to gauge prior knowledge and understanding
- Assessment for learning will be used over the course of a lesson or series of lessons
- We will use endpoint assessments and the support of PSHE Association and My Happy Mind

Independent Learning and Extended Learning:

- Through our use of Picture News and The Economist Educational Foundation (Formerly Burnett News) resources our children are discussing controversial local and world events including 'Do walls divide us or protect us?' Other topics our children have discussed and contributed to online are 'Fake News and Democracy,' 'Syria' 'Year of the Women' and 'Palestine.' All classes throughout KS1 and KS2 have timetabled lessons dedicated to discussing these events. Children are encouraged to develop and articulate their own opinions which are recorded in our awe and wonder books and on our graffiti wall.

How would I use this subject in the future?

- Good grades in PSHE is an essential qualification if you are planning to go onto study the subject further (Citizenship) at (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below). PSHE (personal, social, health and economic) education is a school curriculum subject through which pupils develop the knowledge, skills and attributes they need to manage their lives, now and in the future. PSHE education helps pupils to stay healthy, safe and prepared for life – and work – in modern Britain.

What are the top 5 universities currently for this subject? 1. **Worcester** 2. **Cumbria** 3. **Keele** 4. **Wolverhampton** 5. **Nottingham**	**Jobs you could do with a PSHE and RHE degree** 1. **PSHE Teacher** 2. **Social worker** 3. **Family support worker** 4. **Cognitive-Behavioral Therapy counsellor** 5. **Mental health support worker**
Companies you could work for include; • **Warrington Borough Council** • **You could run your own counselling service** • **Kings Leadership Academy** • **Birchwood High School** • **NHS** • **Bupa**	**Famous people who have studied this subject at university;** • **Ronald Reagan** • **Michelle Obama** • **Kofi Annan** • **Cate Blanchett** • **Meg Whitman (eBay)**

We currently hold the SMSC Quality Mark at the Gold level

Religious Education (RE)
Nursery: Available in continuous provision every day Reception: Available in continuous provision every day KS1: 45 minutes a week KS2: 45 minutes a week
What skills, aims and interests are needed to be successful for this subject? Our RE provision is legal as it follows the Lancashire agreed syllabus for Religious Education 2021 we use this agreed syllabus to plan and teach lessons. Whilst Religious Education is a subject of the basic curriculum, it supports the values, aims and purposes which underpin the breadth of the National Curriculum. It supports learning across a range of subjects as well as broader educational aims. Specifically: • Personal, social, relationship, health and citizenship education. • Spiritual, moral, social and cultural development. • British Values (Promoting fundamental British Values as part of SMSC in schools Nov 2014 Department for Education). • Community cohesion. • The Prevent Duty (Revised Prevent Duty Guidance for England and Wales. March 2015 HM Government). • Reading and writing skills. • The arts: music, art, and drama • History and geography
What will I study? **EYFS** Christianity. Comparisons with other religions and worldviews which represent the school/local community. **KS1** Progressive study of Christianity, Islam and Hinduism. Encountering Judaism, Sikhism, Buddhism and non-religious worldviews. **KS2** Progressive study of Christianity, Islam and Hinduism. Encountering Judaism, Sikhism, Buddhism and non-religious worldviews.
How will RE be assessed? • We will evaluate how pupils are doing and ascertain standards of attainment. • We will enable teachers to adapt and adjust their teaching to ensure that learning supports progression. • We will achieve summative attainment results at the end of KS1 and KS2 using the 'End of Key Stage Expectations' document from Lancashire RE Syllabus as a guide. **Independent Learning and Extended Learning:** • Pupils will be encouraged to think independently, consider and ask questions, sift arguments and explore alternatives as they reflect and develop a sense of personal meaning. This will support the development of communication, reasoning and critical thinking skills and deal with morality and ethics. Teachers will also aim to create a 'safe space' where pupils are free to express their own religious or non- religious identities. The skills to manage controversial and sensitive issues need to be mastered as part of curriculum implementation. We will support the development of communication, reasoning

and critical thinking skills and deal with morality and ethics. Teachers will aim to create a 'safe space' where pupils are free to express their own religious or non- religious identities. The skills to manage controversial and sensitive issues will be mastered as part of curriculum implementation.

How would I use this subject in the future?

- Good grades in RE is an essential qualification if you are planning to go onto study the subject further (Citizenship) at (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below).

What are the top 5 universities currently for this subject?	Jobs you could do with an RE degree
1. Cambridge 2. Oxford 3. Liverpool Hope 4. Durham 5. Glasgow	1. Charity fundraiser 2. Charity officer 3. Secondary school teacher 4. Human Rights lawyer 5. Politics
Companies you could work for include; • United Nations • CAFOD • Oxfam • NHS • Sky	**Famous people who have studied this subject at university;** • Martin Luther King • Aung San Su Kyi • Matt Groening • Hugh Bonneville • Yann Martel

We currently hold the RE Quality Mark at the Gold level

Design and Technology

Nursery: Available in continuous provision every day
Reception: Available in continuous provision every day
KS1: 1 hour a week
KS2: 1 hour a week

What skills, aims and interests are needed to be successful for this subject?

The national curriculum for design and technology aims to ensure that all pupils:

- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- Critique, evaluate and test their ideas and products and the work of others
- Understand and apply the principles of nutrition and learn how to cook.

What will I study?

EYFS

Your child will learn through first-hand experiences. They will be encouraged to explore, observe, solve problems, think critically, make decisions and to talk about why they have made their decisions. Here are some of the typical learning experiences your child will have: Constructing, Structure and joins, Using a range of tools, Cooking techniques, Exploration and Discussion. All children will be given opportunities to discuss reasons that make activities safe or unsafe, for example hygiene, electrical awareness, and appropriate use of senses when tasting different flavourings

When designing and making in KS1, pupils should be taught to:

Design

- Design purposeful, functional, appealing products for themselves and other users based on Design criteria
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing'
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- Explore and evaluate a range of existing products
- Evaluate their ideas and products against design criteria

Technical knowledge

- Build structures, exploring how they can be made stronger, stiffer and more stable
- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

When designing and making, pupils in KS2 should be taught to:

Design

- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- Investigate and analyse a range of existing products
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- Understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- Apply their understanding of computing to program, monitor and control their products.

Cooking and nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.
Pupils should be taught to:

Key stage 1

- Use the basic principles of a healthy and varied diet to prepare dishes
- Understand where food comes from.

Key stage 2

- Understand and apply the principles of a healthy and varied diet
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

How will Design Technology be assessed?

The D&T Association recommends that schools use the following principles, which are consistent with the Government's initial thinking. A formative assessment system will help;

- Pupils to have opportunities to reflect on their learning.
- Retrieval activities, which will be used to assess what pupils can remember
- We will use quality questioning both to assess and to advance children's learning. We will actively involve all children in their own learning through, for instance, discussion and debate with peers and teacher; assessing, reviewing and reflecting on their own design technology performance.

- We will set out steps so that pupils reach or exceed the end of key stage expectations.
- We will judge whether pupils are on track to meet end of key stage expectations
- We will pinpoint aspects of the curriculum where pupils are falling behind and recognise exceptional performance and provide teachers with support for addressing this.
- We will support planning and teaching for all pupils
- We will report to parents and, where pupils move to other schools, provide clear information about each pupil's strengths, weaknesses and progress

Independent Learning and Extended Learning:

- There will be ample opportunities for children to extend their learning of Design Technology including at dinnertimes with our extended curriculum activities. These will include construction activities, project work, water and sand activities, water fall activities, Lego and channeling water play.
- We may set project homework for some year groups.

How would I use this subject in the future?

- Good grades in Design Technology is an essential qualification if you are planning to go onto study the subject further at (Kings Leadership Academy, Birchwood High, Sir Thomas Boteler), 6th Form and college (Kings Leadership Academy, Priestley College, Carmel College and then at university (see below). Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They will acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils will learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they will develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

What are the top 5 universities currently for this subject?

1. **California Institute of Technology (US)**
2. **Cambridge**
3. **Oxford**
4. **Imperial College London**
5. **University of Manchester**

Jobs you could do with a Design Technology degree

1. **Product designer**
2. **Graphic designer**
3. **Advertising design director**
4. **Production designer (film, television, theatre)**
5. **Car designer**
6. **Furniture designer/ restorer**

Companies you could work for include;

- **Apple**
- **Microsoft**
- **Google**
- **BMW**
- **The Repair Shop (BBC1 programme)**

Famous people who have studied this subject at university;

- **Alan Rickman**
- **Peter Capaldi**
- **Kalpana Chawla**
- **Alfred Hitchcock**
- **James Dyson**

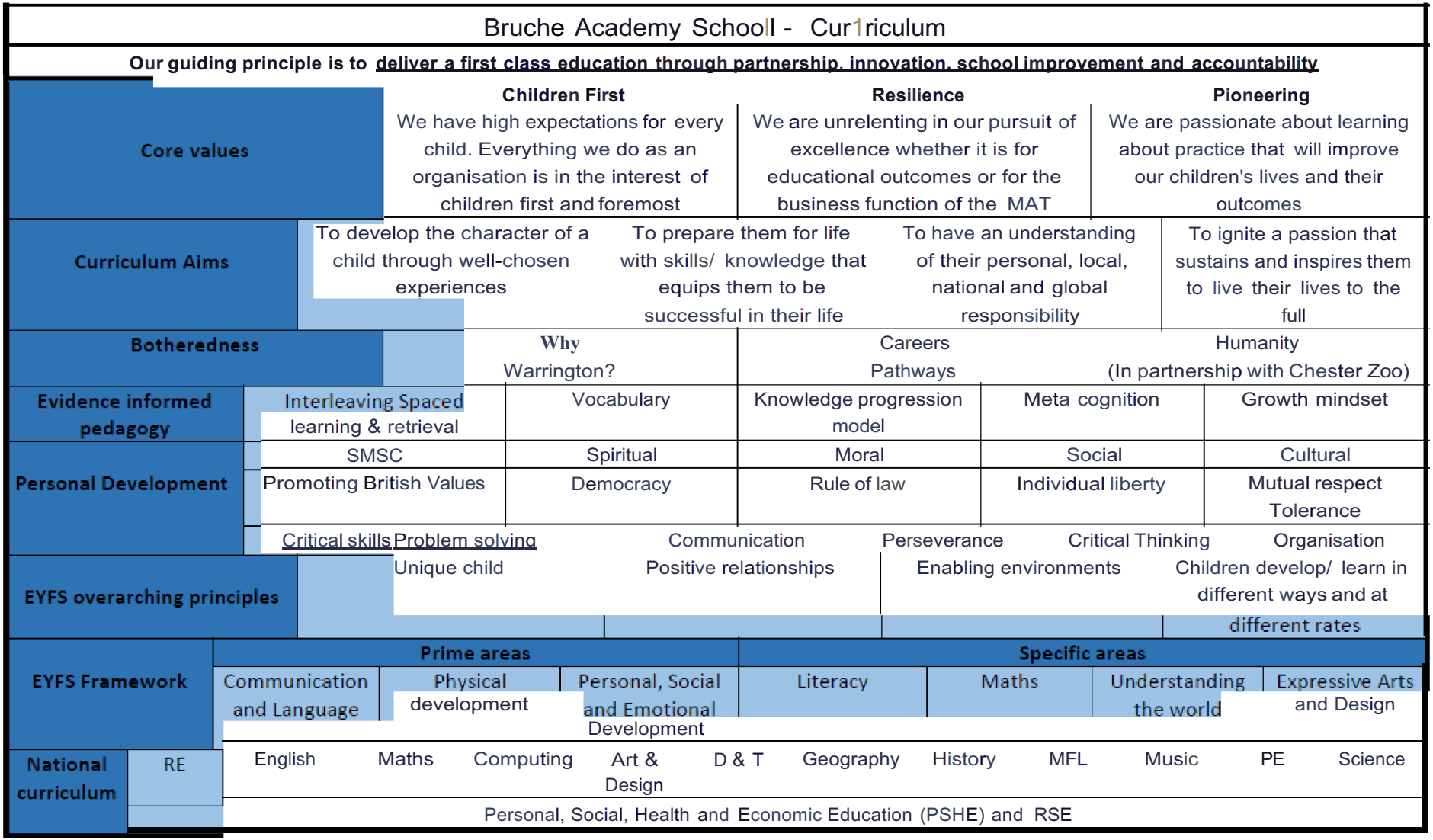
We are currently working towards achieving the DT Quality Mark

Appendix 1 – Teaching Multiplication tables

Year group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	When counting objects, children should be able to group in ones, twos, fives and tens and record the total.					
Year 1	Experience of counting in 1's, 2's, 5's and 10's					
Year 2	x1	(x1) x2	x5	(x5) x10	x0	Revision and retrieve
Year 3	(x2) x4	(x4) x8	x3	(x3) x6	(x3) x12	Revision and retrieve
Year 4	x9	x7	x11	x12	Revision	Assessment
Year 5	• Retrieve x12 • Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. • Multiply and divide numbers mentally drawing upon known facts. • Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.					
Year 6	• Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. • Perform mental calculations, including with mixed operations and large numbers. • Identify common factors, common multiples and prime numbers.					

Short term memory retrieval activities will take place at the end of every half term, long term retrieval activities will take place at the end of every term.

Appendix 2 – Curriculum on a Page



Bruche Academy Schoolll - Cur1riculum						
Our guiding principle is to deliver a first class education through partnership, innovation, school improvement and accountability						
Core values		**Children First** We have high expectations for every child. Everything we do as an organisation is in the interest of children first and foremost		**Resilience** We are unrelenting in our pursuit of excellence whether it is for educational outcomes or for the business function of the MAT		**Pioneering** We are passionate about learning about practice that will improve our children's lives and their outcomes
Curriculum Aims	To develop the character of a child through well-chosen experiences		To prepare them for life with skills/ knowledge that equips them to be successful in their life		To have an understanding of their personal, local, national and global responsibility	To ignite a passion that sustains and inspires them to live their lives to the full
Botheredness		**Why** Warrington?		Careers Pathways		Humanity (In partnership with Chester Zoo)
Evidence informed pedagogy	Interleaving Spaced learning & retrieval	Vocabulary		Knowledge progression model	Meta cognition	Growth mindset
Personal Development	SMSC	Spiritual		Moral	Social	Cultural
	Promoting British Values	Democracy		Rule of law	Individual liberty	Mutual respect Tolerance
	Critical skills Problem solving		Communication	Perseverance	Critical Thinking	Organisation
EYFS overarching principles	Unique child		Positive relationships	Enabling environments		Children develop/ learn in different ways and at different rates
EYFS Framework	**Prime areas**			**Specific areas**		
	Communication and Language	Physical development	Personal, Social and Emotional Development	Literacy	Maths	Understanding the world / Expressive Arts and Design
National curriculum	RE	English	Maths	Computing	Art & Design	D & T	Geography	History	MFL	Music	PE	Science
	Personal, Social, Health and Economic Education (PSHE) and RSE											

DEFINITIONS

Evidence informed pedagogy	**Interleaving** Implementing a schedule of practice that mixes different kinds of problems, or a schedule of study that mixes different kinds of materials, within a single study session Spaced learning Series of short intense training sessions separated by short intervals in which learners do a completely different activity.	**Vocabulary** Knowledge and abilities involved in knowing a word, with generalisation being the ability to define a word application the ability to select or recognise situations appropriate to a word; breadth the knowledge of multiple meanings; precision the ability to apply a term correctly to all situations and to recognise inappropriate use; and availability the actual use of a word in thinking and discourse. Ref: Impact Issue 3, **page** 6. Cronbach 1942	**Retrieval** Regular, efficient recall of knowledge Knowledge progression model Rich web of knowledge with thoughtfully designed assessment practise	**Meta-cognition** The awareness individuals have of their own knowledge, their strengths and areas to develop, and their beliefs about themselves as learners	**Growth mind-set** Belief that intelligence can be developed and you can get smarter through hard work and the use of efficient strategies and help from others
SMSC	**Spiritual** Exploring beliefs and experience; respecting faiths, feelings and values; enjoying learning about oneself, others and the surrounding world; using imagination and creativity; reflect	**Moral** Recognise right and wrong; respect the law; understand consequences; investigate moral and ethical issues; offer reasoned views.	**Social** Use a range of social skills; participate in the local community; appreciate diverse viewpoints; participate, volunteer and cooperate; resolve conflict; engage with the 'British values' of democracy, the	**Cultural** Appreciating cultural influences; appreciating the role of Britain's parliamentary system; participating in culture opportunities; understand, accept, respect and celebrate diversity.	

Appendix 3 – Curriculum on a Page Definitions

Appendix 4 – Career Pathways (Part of the curriculum offer at Bruche Primary School)

1.	A stable careers programme	Every school and college should have an embedded programme of career education and guidance that is known and understood by students, parents, teachers, governors and employers.
2.	Learning from career and labour market information	Every student, and their parents, should have access to good quality information about future study options and labour market opportunities. They will need the support of an informed adviser to make the best use of available information.
3.	Addressing the needs of each student	Students have different career guidance needs at different stages. Opportunities for advice and support need to be tailored to the needs of each student. A school's careers programme should embed equality and diversity considerations throughout.
4.	Linking curriculum learning to careers	All teachers should link curriculum learning with careers. STEM subject teachers should highlight the relevance of STEM subjects for a wide range of future career paths.
5.	Encounters with employers and employees	Every student should have multiple opportunities to learn from employers about work, employment and the skills that are valued in the workplace. This can be through a range of enrichment activities including visiting speakers, mentoring and enterprise schemes.
6.	Experience of workplaces	Every student should have first-hand experiences of the workplace through work visits, work shadowing and/or work experience to help their exploration of career opportunities, and expand their networks.
7.	Encounters with further and higher education	All students should understand the full range of learning opportunities that are available to them. This includes both academic and vocational routes and learning in schools, colleges, universities and in the workplace.
8.	Personal guidance	Every student should have opportunities for guidance interviews with a career's adviser, who could be internal (a member of school staff) or external, provided they are trained to an appropriate level. These should be available whenever significant study or career choices are being made. They should be expected for all students but should be timed to meet their individual needs.

We define careers education as learning to make informed decisions. Our students face decisions about their futures that include work.

The interconnection of careers and PSHE enables our students to learn social rules, emotional awareness and management, establishing and managing relationships with others, recognising and expressing preferences, and building skills and confidence at self- advocacy.

USING THE BENCHMARKS

A well-structured careers programme, framed by the Benchmarks, that provides encounters and experiences of work, enables students to make decisions, or participate in decision- making, and base these decisions on first-hand experience.

By assessing ourselves against the Benchmarks, we have identified opportunities to strengthen our careers programme. **See Below:**

Mapped Gatsby Benchmarks with activities:

	Gatsby Benchmarks	Linked outcomes to Quality in Careers Standard	Possible activities linked to Gatsby Benchmarks and Quality in Careers Standard
1.	A stable careers programme	Every school and college should have an embedded programme of career education and guidance that is known and understood by students, parents, teachers, governors and employers.	**Year 1** Different types of employment **Year 2** Different types of employment and employment skills **Year 3** Work life behaviours and gender stereotypes **Year 4** Finance and labour market information **Year 5** CV writing workshop **Year 6** Budgeting and interview skills. Which careers will suit you?
2.	Learning from career and labour market information	Every student, and their parents, should have access to good quality information about future study options and labour market opportunities. They will need the support of an informed adviser to make the best use of available information.	Labour market information describes the condition of the labour market, past and present, as well as future projections. We will make clear where work opportunities are increasing or decreasing, what occupations exist, what pupils need to study to become a professional in that occupation, what is required to take up an occupation, how one can find a job, change job or progress in a career.
3.	Addressing the needs of each student	Students have different career guidance needs at different stages. Opportunities for advice and support need to be tailored to the needs of each student. A school's careers programme should embed equality and diversity considerations throughout.	Destination Data reporting. Each pupil completes an aspirations questionnaire each year. Students from Year 5 onwards have access to a personalised account with "World Class schools' that allows them to discover and investigate a variety of careers based on their responses to 'I am, I feel, I Learn' characteristics. We remind pupils 'You are World Class because of who you are, how you feel and how you learn. This app lets you upload a range of evidence, which your teacher checks, to demonstrate that you are World Class.
4.	Linking curriculum learning to careers	All teachers should link curriculum learning with careers. STEM subject teachers should highlight the relevance of STEM subjects for a wide range of future career paths.	Pupils in all year groups learn explicitly how each subject links to careers and which careers it supports. Linking learning to careers is done explicitly in every lesson in every classroom.

5.	Encounters with employers and employees	Every student should have multiple opportunities to learn from employers about work, employment and the skills that are valued in the workplace. This can be through a range of enrichment activities including visiting speakers, mentoring and enterprise schemes.	A programme of guest speakers in assembly and to individual classes. Sessions specific to the needs of certain groups have been organized. The Picture News is used as a tool for all year groups to find out more about careers. We have developed a number of links with businesses that routinely support the careers initiatives including Asda, Tesco, Amazon, Dominoes, The Hut Group, Warrington Wolves, Chester Zoo, Total Jobs, The National Trust and Sci-Tech Daresbury.
6.	Experience of workplaces	Every student should have first-hand experiences of the workplace through work visits, work shadowing and/or work experience to help their exploration of career opportunities, and expand their networks.	The ClassVRs allow children to see career settings. We can provide an accessible representation of a range of careers through this highly engaging, safe and inclusive delivery model. Through these experiences, our pupils will get a feel and understanding of what job roles entail and support them to make informed choices about their career pathways for future year.
7.	Encounters with further and higher education	All students should understand the full range of learning opportunities that are available to them. This includes both academic and vocational routes and learning in schools, colleges, universities and in the workplace.	Local providers of Secondary education are invited to attend and to present to pupils moving to further education within 2 years (Year 5 and Year 6). Speakers are invited to engage with our pupils through a programme of events in assembly time and class time. We work very closely with our Secondary High School partners in Warrington but also local selective schools in the North West. Extra-curricular activities are routinely advertised and promoted amongst our pupils to help them develop a deeper understanding of the wider impact of their subject knowledge, especially through sport, The Arts and Music and Health and Well-being.

8.	Personal guidance	Every student should have opportunities for guidance interviews with a career's adviser, who could be internal (a member of school staff) or external, provided they are trained to an appropriate level. These should be available whenever significant study or career choices are being made. They should be expected for all students but should be timed to meet their individual needs.	All Year 6 pupils have a 'Exploring Possibilities' meeting with their teacher before leaving Bruche. This will include discussing the following; • Thinking about what jobs and roles to pursue. • Understanding learning pathways and how to access and succeed in them. • Recognising the relationship between learning, qualifications and work. • Building awareness about workplaces, workplace culture and expectations. Analysing and preparing for recruitment and selection processes.

Appendix 5 – Examples of how Mathematics skills link with Careers

Mathematics Skills and knowledge linked to careers

Year 1

Number and Place value	Jobs you can do by becoming an expert in this learning objective
Count to and read across, forwards and backwards, beginning with 0 or one, from any given number.	**Teacher**
Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.	**Shop owner**
Given a number, identify one more or one less.	**Head Chef**
Addition and Subtraction	
Represent and use number bonds and related number facts to 20.	**Bee Keeper**
Add and subtract digit and 2-dgit numbers to 20, including 0.	**Zoo Keeper**
Multiplication and division	
Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the class teacher.	**Lawyer**
Fractions	
Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	**Own your own Bakery**
Recognise, find and name a quarter as one of two equal parts of an object, shape or quantity	**Head Chef**
Measurement	
Compare, describe and solve practical problems for measurement and begin to record lengths and heights.	**Architect**
Compare, describe and solve practical problems for measurement and begin to record mass/weight	**Aerospace engineer**
Compare, describe and solve practical problems for measurement and begin to record capacity and volume.	**Boat builder**
Compare, describe and solve practical problems for measurement and begin to record time.	**Sports Coach**
Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	**Teacher**
Geometry	
Recognise and name common 2-D shapes	**Bricklayer**
Recognise and name common 3-D shapes	**Civil engineer**
Describe position, direction, movement, including whole, half, quarter and three- quarter turns.	**CAD technician**

Year 2

Number and Place value	Jobs you can do by becoming an expert in this learning objective
Compare and order numbers from O to 100	**Headteacher**
Use place value and number facts to solve problems	**Events manager**
Use<> and = signs correctly	**Fishmonger**
Count in steps of two, three, and five from 0, and in tens from any number forward and backwards.	**Nurse**
Addition and Subtraction	
Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures.	**Pharmacist**
Solve problems with addition and subtraction applying an increasing knowledge of mental and written methods.	**Pharmacist**
Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100	**Salesmanager**
Add and subtract numbers using concrete objects, pictorial representations, and mentally, including a 2-digit number and ones	**Shopkeeper**
Add and subtract numbers using concrete objects, pictorial representations, and mentally, including **a 2-dlglt number and tens.**	**Travel agent**
Add and subtract numbers using concrete objects, pictorial representations, and mentally, **including two 2-digit numbers**	**Retail buyer**
Add and subtract numbers using concrete objects, pictorial representations, and mentally, including adding 3 1-dlglt numbers.	**Bookseller**
Multiplication and division	
Recall and use multiplication and division facts for the 2, 5 and 10 x tables, including recognising odd and even numbers.	Auditor
Calculate mathematical statements for multiplication and division with the x tables and write them using the x, -;- and = signs.	**Bank** manager
Show that multiplication of two numbers can be done in any order and division of one number by another cannot.	Finance officer
Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context.	School business manager
Fractions	
Recognise, find, name and write fractions 1/3, ¼, 2/4 and¾ of a length, shape, and set of objects or quantity.	Head Chef
Write simple fractions, for example½ of 6 = 3 and recognise the equivalence of 2/4 and 1/2	Teacher
Measurement	
Choose and use appropriate standard units to estimate and measure length, height in any direction (cm/m); mass (kg/g); temperature ('C); capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels.	**Fire Fighter**
Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.	**Architect**
Geometry	
Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.	**3D printing technician**
Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.	**Dressmaker**
Identify 2-D shapes on the surface of a 3-D shape	**Planningofficer**
Compare and sort common 2-D and 3-D shapes and everyday objects.	**3D printing technician**
Order and arrange combinations of mathematical objects in patterns and sequences.	**Softwane developer**
Statistics	
Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.	Data scientist
Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.	Shop Keeper

Year3

Number and Place value	Jobs you can do by becoming an expert in this learning objective
Count from O irn mu'ltiples of 4, 8, 50 and 100.	**Auditor**
Work out if a given number is greater or less than 10 or 100.	**Charity fundraiser**
Recognise the place value of each digit in a 3-digit numbers,(hundreds, tens and ones)	**Finance officer**
Solve number problems and practical problems involving these ideas,	**Auditor**
Addition and Subt.raction	
Add and subtract numbers mentally including a 3-digit number and ,ones.	**Bank manager**
Add and subtract numbers mentally including a 3-digit number and tens.	**Business project manager**
Add and subtract numbers mentally including a 3-digit number and hundreds.	**Finance officer**
Add and subtract numbers with up to three digits, using formal written methods of ,columnar addition and su'btraction..	**School business,mana,ger**
Multiplication and division	
Recall and use multiplication and divisio:n facts,for the 3, 4 and ,8 tables.	**Stockbroker**
Write and calculate mathematicallstatements for multiplication and division, including positive integer scaling probllems and corresponden,ce problems in which n objects are connected to m objects.	**Public finance accountant**
Fractions	
Count up and down in tenths; recognise that tenths arise from dividing an object into to ten equal parts a,nd irn dividing 1- digit numbers or quantities by 10,	**Par,amedic**
Recognise, find arnd write fractions of a discrete set of objects: unit fractions and non-unit fractions with small dernominators,	**Fitness instructor**
Recognise and show, using diagrams, equivalent fractions with small denominators.	**Jockey**
Add and subtract fractions with the same denominator within one whole.	**Motors ,port engineer**
Compare **and** order unit fraction,s, and fractions with the same denominators.	**Performance sports scientist**
Solve pr,oblem, that invo.lve all of the abov.e.	**Performance sports scientist**
Measurement	
Measure, compare, add and subtract: lengths (m/cm/mm); mass **(kg/g);** volume/capacity (l/ml)	**Police officer**
Add **and** subtract amounts of money to give change, using both£ an,d pin practical ,contexts,	**lHairdrMser**
Tell and write the time from an analogue clock and 12 and 24-hour clock.	**Medical herbalist**
Geometry	
Draw 2-D shapes and make 3-D shapes,using modelliirng materials; recognise 3-D shapes,irn different orientations and describe them.	**Arclhaeologist.**
Recognise anglesas a property of a shape or a des,criptio:n of a turn	**Agricultural engineer**
ld'entify right angles, recognise that two right angles make a lhalf turn, thr,ee make three quarters of a turn and four complete a turn; identi'fy whether angles are greater or lessthan a right angle.	**Building** technician
ld'entify horimn,tallland vertical line.,, and pairs of perperndicular and parallel lines,	**Architect**
Statistics	
In,terpret and present data using bar charts, pictograms and tables.	**Geoscientist**
Solve one-step and two-step questions using information p:resented in scaled bar charts and pictog:rams and tables.	**Meteorologist**

Year4

Number and Place value	Jobs you can do by becoming an expert in this learning objective
rmmt in multip'IP,of,fi,7,<l,J, anrl 1000	**Actu;iry**
Order and compare numbers beyond 1000	**Businessadviser**
Count t>ackwards through Oto include negative numbers.	**Financial adviser**
Round any numbers to,the nea,rest 10, 100 or 1000.	**Investment analyst**
Addition and Subtraction	
Add numbers with up to 4 dig:its using the formal written method of column,ar addition.	**Private practice accountant**
Subtract numbers with up to 4 digits usin theformal written methods of colummu subtraction.	**Economist**
Solve addition and subtraction problems in context, deciding which operations and methods lo use and why,	**Financial adviser**
Multiplication and division	
Recall multiplication and division fa,cts for multiplication tables up to 12 x 12,	**Anaesthetist**
Use place value, lknown and derived facts to multiply and divide mentally, including x by O and 1 and dividing *t>y* **1;** multiplying together 3 numbers.	**Dietitian**
Recognise and use factor pairs and commutativity in mental calculalion,s.	**Microbiologist**
Multiply 2. digit and 3 digit numbers by al digit number using formal written layout.	**Pharmadst**
Solve problems invo:lving multiplication and adding, including using the distributive law to multiply 2. digit numbers by 1 digit, integer scaling problems and harder corr,e5:pondence problems such as n objects are connected tom objects.	**Physiotherapist**
Fractions	
Recognise and show, using diagrams, famillies of common equivalent fractions.	**Surgeon**
Solve problems invo:lving increasingly harder fractions,to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number,	**Helicopter pilot**
Add and s,ubtract fractions with he same denominator.	**Head Chef**
Recognise and write decimal eq,uivalents of any number of tenths or hundredths,	**Fitne.ss instructor**
Recognise and writ,e decimal eq,uivalents to ¼,½ and¾	**Jockey**
Round decimals with ,one decimal place to the nearest whole number.	**Motor5port engineer**
Compare numbers with the same number of decimal places up to two decimal.	**Performance sportsscientist**
Solve simple money a,nd measure problems involving fractions and decimals to two decimal places.	**Butcher**
Measurement	
Convert between different units of measure,	Chemical **engineer**
Measure and calculate the perimeter of a rectilinear fi11:ure in cm and m,	**Architect**
Estimate,,oompa,re and ,calculate different measures, including money in pounds and pence.	**Accountant**
Geometry	
Compare and classify geometric shapes, including qu,adnilaterals and triangles, based on their properties and sizes.	**Architect**
Identify acute and obtuse angles and compare and o:rder angles up to two rig:ht angles by 5ize.	Technical al'Chitect
Identify lines o,f symmetry in 2-D shapes presented in different orientations.	**Glassmaker**
Complete a simple symmetric figure with resrect to a specific line of symmetry.	**Pattern** cutrter
Statistics	
Interpret and present disc,rete and continuous data using appropriate geographical methods, including bar ,charts and time graphs.	**Zoologist**
Solve comparison, sum and difference pro'blems using information presented in bar charts, pictog,rams, tables and other graphs.	**Headteacher**

·vear 5

Number and Place value	Jobs you can do by becoming an ex,pel't in this learning objective
!Re;id ,ind write nullflbers up,to 1,000,.000	**Ban'k manag·er**
Order and compare numbers up 1, 000,000	**Business** ana'l¥ t
!Interpret negative numb@rs in contel!li.	**Ban'k manager**
Count forwards and bad(w.ards with posi·tive and n@gati11e whol@numbe:rs including through zero.	**llJefr\geration designer**
Addition and Subtraction	
Add whofe numbers wi·tn more than four digiits, includ'ing using formal written methods.	**Auditor**
Subtract whole nullflbers with more than four digiits, including using formal written methods.	**Economist**
Add a11d subtract 11umbers mentillv witn increasinglv large 11umbers.	**Shop Keeper**
Solve problems involving numbers u;p to 3 decimal places.	**Fin·a11ce officer**
Multiplication and division	
!ld'entify multiples and factors, including finding all factor p,airs of **a** number and common factors of2 numbers.	**Sdiloal business manager**
Multiply numbers up,to4 digits **by a** / or2 dit!:it number using formal written methods.	**Ta1< inspector**
Multiply 11nd divid'e mentanv drawing upon know11facts.	**Accounting technTciian**
Divide numb@rs up to **4** d'.igjts by **a** 1 digit **whole** number.	**Auditor**
!Int@rpret remaind@rs appropriate to context.	**Ban'k manager**
Multiply 11nd divid'.e whole numbers;md those involving decimals by iO,l.On and 1000.	**Teacher**
IR@cognis@and us@ squar@numb@rs and cu'.b@d numbers and the notation for each.	**Flooring fitter**
Solv@probl@ms involving multiplication and division, including using knowf@dge **of** factors and mult[pl@s., squarns and cubes.	**Flooring fitter**
Solve problems involving 11dditim1, subtraction, multiplication 11nd division and a combination **of** these, induding understanding the me.aning ohhe equals sign.	**Fi11·a11ce officer**
Fractions .and Dec;imals	
!Identify_, nam@ and writte tMJuivaf@nt fractions of a giv@n fraction., repmsent@d viisua[ly, indluding tenths and hundredths.	Insurance broker
IR@cognis@mix@d numbers and improperfractions and convert from on@for to the other.	**Baker**
Add 1111d subtract fractions with the same denomin11tor and th11t are multiples of the same number.	**Butc er**
Multiply proper fractions and mixed numbers bv whole numbers, supported by material& and diagrams.	**Antique dealer**
IR@cognis@% and write perrnntag@s.as **a** fraction with dl!flOminator 100 and as a decimal.	**Beaaty** consul nl
Solve problems which require knowing percentage and decimal equivalents of½,¼, 1/':., 2/5, 4/5 and tho,e fractions with *a* d'.enominator witn a multiple of 10 or 25.	**Fi hmonger**
Measurement	
Convert lJ@tw@en diff@rent units of m!!tric measure.	Horticultural **manager**
M@asure and calculate the p@rim@t@r of composit@rnctilinear shapes in oontim@tres and m@tres.	Architect
Calculate and campare the area of a rectangl,e (including squares), and [nduding using stand11rd units, square centimetres, sq,uare metres and estimate the 11rea of irregular shapes.	**Government planning** Officer
Geometry	
!ld'.entify ",-D shapes, including cubes and rnboids, from 2:-D representations.	AnTmatm
!Know angles@m@asured in degr@@s: @stimat@ and comparn acute, obtus@and mflex angles.	**Fashion d'es\gner**
Draw given angles and measure them in degrees.	**Fine** artist
!Identify *a*ngtesat a point and *a* whole tum.	Pillot
!Identify angtesat **a** point on a straight line and half a rum.	Pit.at
!ld'.entify other multiples of 90 degrees.	**Carpente**r
Use the properties of rectangles to deduce' re!ated facts and find missing lengths and angles.	**Furniture des\gner**
Distinguish betw@@n regular and irregular polygonsbas·@d on reasoning about equal sid@s and angl@s.	**Graphic desjgnu**
Statistics	
Salve comparison, sum and difference problems using information presented in *a* line graph.	Market researdh d'ata an,alyst
Compl·ete:, read ;md interpret information in tables, induding time:tallles.	Market researdh d'ata analyst

Number and Place value	Jobs you can do by becoming an gpert in this learning objective
!'lead and write riumbers U:P to 1(!)i(!OO,OOO,	**Musician,**
Order a11d omnp:are m1mbers U:P 10,l,)Q(!),000	**T!!.llllle d lgner**
Determln!! the value of each digit In riumbers u,p Hl (!)oo mm	**Teaching A!isirtan,l**
!'loo rut any whole numOEr	**Video** @ditor
use l'lega lve m1moor In cootext al'ld calculate Intervals across Q.	**Auditor**
Solve 11umoor am! practilcil prolllems wL h place valu@.	Rnancl!. officer
Addition and Subtraction	
Solve addition arid mllllll•W!p protllems In ool'ltexts, deciding which methoo and ope1atlon to lll,e arid wlily.	F,ln andal ad\llser
use es lmatlm1lO cheok answe1s a11d approprlate d!!gree of acoma<'.Y	Managem@nt ac.counu nl
Multi,plic.ation **and division**	
Multiply mliltl - digit r1111mbers up to ,i digit, by a 2 dl.gjl riumber using formal w1lttll'l metho!!s.	**Pu'bllc finance ac.coontant**
Dlvld!! number, up to 4 digits tiy a 2 digit whole l'luml:ler.	Cheml t
Inlerpr!!l remal111de1, **a,** whol'e numoor remalnd@1,, f1actions or tiy rolllndlng.	Cill**mate sdenllrt**
Use knowledge of!he onJe1 of operations to carry out op8ratlons usln,g llile four operations.	**Data analyrt-slall!!ltlclan**
Solve problems lnvolving addition, .utltraction, mulllpllcatlori a111d dl:Vl lol'l.	Dal.i sdenlirt
Multiply 1-dlglt l'lumber, with up 10 2 decimal places tly whole riumbe1s.	**En·\llrcnmenta'll consultant**
F,ractions and Deoimals	
use factiors *to* simplify f1actlons.	**Food** s,olen ls-t
use commoo multipl!!Sto e,cpress fractions with the same- clenomlnator.	Gecsclentlrt
Com,pare arid order fractlloos, ll'lldudlng fractions les, than **t.**	Health and safety ad11lser
Add and ,Libtrac:t fractions with dllfe1ent deooml11ators arid mlc)(ed l'lumbe1s.	Da1.i sdenllrt
Multiply slm,pre pairs of proper i1aotlons, writing the- answer In Its simplest lmm.	Forensic ooll!!llon lrwest!lgalor
Dlvld!! proper fractloos by whole nlllmbers.	tntelllc ence ana'l rt
Use the equL11a fence oetween fiac lons, deolmals a11d percerltag!!S.	**MP**
Ratio and Propgrtion	
Solve problems ll'lvolvlrig the relative size of two quaritlli!!, where missing valu!!Seari be lou111d Inleg@r m ul lpllcaliol'l arid division facts.	Siologlrt
SolYe problems l11vol11lng the cal'oulallon of perec@nlages. 15% ol 360	Agronomist
Solve problems lnvolving slmltar shapes whe1e the s.cale factor ls lmown or can be lolllnd.	Blotechnologlst
$olve problems hnrclvlng unequahl arl111g and grc111plng uslrig knowledge of fractions and multiples.	Cartographer
Al.!lebra	
Gene1ate and d!!Scrlbe li111ear l'lUmb@1 seguel'lce,	Astronome1
El<!press ml slng number problems algebrcalcalllv	**Chemical erwMer**
Find pairs of numoors ttlat satisfy an equatlo11 with two unknowns.	**Energv engineer**
Measurement	
Solve problems l11vol11lng title cal'oulallon and mn11e..-slo11of units of measure, using decimal notation up to l decimal places.	foreMIC psvdhologl t
use, read, w1lte-and 0011vert ootweeri Uaridard Ul'llts, convertll'lg mea&uremel'lt ol len,gbh, mass, volume arid time.	**Hvdrllogirt**
Flecognlse that shape, with lh!! same area can have different perimeters and vice versa	CAO U!chnlcian
Calculate the area of parallelogiams and triangles.	CAD **technician**
Geometry	
Draw 2-d shapes using gl11!!n dimensions and ar1gl!!s..	**Aerotpa engineer**
Flecogrilse, desnll:le anll bultd slm!'.)ll! l d shapes, lncl'udlng makln,g nets.	Agricult.ura'l**englnel!.r**
Com,pare and dlasslly geometr.lc hapes l:las!!d on thell pmpertie-s and sl1e .	CNC madhinlrt
Find un l'lown angle, In anv triangles, quadrllaleral.arid regular triangle,.	Toolmaker
Illunrate arid riame part, of cllcles, ll'ldludll'lg radius, dlamet@r and clroum!er,enee arid know that the-diameter, twloe the radius.	**Toolmaker**
Flecognlse angtes wile1e they meet at a point, are on a straight line, or are 11ertlcall opposite a11d flnll ml lr1g angles,_	**Niav l archll:ll.ct**
D@s.::rlbe po,ltiol'ls on the full oooidlnate grid.	**Cartograp'l'lei**
Draw al'ld tran,lale slmpre shape5 0111 he coordinate pla111e, al'ld reflect them In !liil! a){e,.	Mate l:al's e11gin.eer
Statistic:s	
1r11erpre1and construrt pie dharts .al'ld llri!! graphs and use th!!Se to soll/e probr@ms..	**Geoted,** nk:lan,
Calculate a11d lriterpret tile mean as an ayerage.	Econ.omlst