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BITTERLEY C OF E PRIMARY SCHOOL
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Intent, implementation, and impact Statement: Design Technology at Bitterley CofE Primary School

At Bitterley, we encourage pupils 'to be courageous, strong and do everything in love.'

The importance of understanding that each of us is rooted in love is not under-estimated at Bitterley.

'Love always trusts, always hopes, always perseveres.' Corinthians 13:7 Trusting in love gives us the courage to be ourselves. Courage is from the Latin 'coeur' which means 'To tell the story of who you are with your whole heart'. Our intention is for our pupils to leave Bitterley prepared for 'Life in all its fullness' and ready to tell their own stories.

Our Christian vision has driven us to create a bespoke curriculum for our pupils that pursues the acquisition of wisdom, knowledge and skills alongside educating for aspiration, dignity, and respect. It is also our intention to nurture a sense of community, so that all members of our school develop a deep sense of belonging, both locally and within the wider world. We believe that these attributes will support our pupils to live well together and flourish, as they move on to High School and beyond.

Our curriculum offer is therefore divided into three focus areas: '**Courage, strength and love**':

Courageous – Living wholeheartedly. Using the knowledge and skills in our curriculum to choose our own path free from stereotyping; being curious, aspirational. Speaking out for those who do not have a voice.

Strength – Having a growth mindset, developing resilience, being able to persevere to achieve our goals to create a confident well-rounded citizen in our diverse world.

Love – Embracing our neighbours, developing a greater awareness of the challenge's others face in life and how we can make a difference in our school community, local community and further afield. Through the curriculum we develop pupils understanding of challenges locally and globally. We teach pupils to listen with respect.

At Bitterley CofE Primary School, we believe that a carefully sequenced curriculum can empower our pupils and reduce social inequality, whilst providing the knowledge they need for the next stage of their education and beyond. We view our curriculum as a spiral: the mapped-out journey of concept building leading to a change in long term memory and an

increase in knowledge. Through progressive concepts throughout the curriculum, the children will develop a deep and rich understanding, meaning that the knowledge and skills that are acquired are more likely to be remembered. Our curriculum sets out WHAT will be learned and WHEN it will be learned. We understand that cultural capital is the essential knowledge that children need to prepare them for their future success. Through our curriculum we provide different experiences and opportunities to support the accumulation of knowledge, behaviours, and skills that a child gains over time

Intent:

At Bitterley Primary School, the Design and technology scheme of work aims to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. We want pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work and the work of others. Through our scheme of work, we aim to build an awareness of the impact of design and technology on our lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements.

Our Design and technology scheme of work enables pupils to meet the end of key stage attainment targets in the National curriculum and the aims also align with those in the National curriculum. EYFS (Reception) units provide opportunities for pupils' to work towards the Development matters statements and the Early Learning Goals.

Kapow Primary is an Artsmark partner and is able to support schools on their Artsmark journey, inspiring children and young people to create, experience, and participate in great arts and culture.

Implementation:

The Design and technology National curriculum outlines the three main stages of the design process: design, make and evaluate. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical, and technical understanding required for each strand. Cooking and nutrition has a separate section, with a focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality.

The National curriculum organises the Design and technology attainment targets under four subheadings: Design, Make, Evaluate, and Technical knowledge. We have taken these subheadings to be our Kapow Primary strands:

- design
- make
- evaluate
- technical knowledge

Cooking and nutrition is given a particular focus in the National curriculum and we have made this one of our six key areas that pupils revisit throughout their time in primary school:

- Cooking and nutrition
- Mechanisms/ Mechanical systems

- Structures
- Textiles
- Electrical systems (KS2 only) ● Digital world (KS2 only)

Kapow Primary's Design and technology scheme has a clear progression of skills and knowledge within these strands and key areas across each year group. Our National curriculum overview shows which of our units cover each of the National curriculum attainment targets as well as each of the four strands. Our Progression of skills shows the skills and knowledge that are taught within each year group and how these skills develop to ensure that attainment targets are securely met by the end of each key stage.

Through Kapow Primary's Design and technology scheme, pupils respond to design briefs and scenarios that require consideration of the needs of others, developing their skills in the six key areas.

Each of our key areas follows the design process (design, make and evaluate) and has a particular theme and focus from the technical knowledge or cooking and nutrition section of the curriculum. The Kapow Primary scheme is a spiral curriculum, with key areas revisited again and again with increasing complexity, allowing pupils to revisit and build on their previous learning.

Lessons incorporate a range of teaching strategies from independent tasks, paired and group work including practical hands-on, computer-based and inventive tasks. This variety means that lessons are engaging and appeal to those with a variety of learning styles. Each lesson uses recall activities to embed understanding of skills and facts to long term memory through the use of flashback retrieval exercises. Differentiated guidance is available for every lesson to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

Strong subject knowledge is vital for staff to be able to deliver a highly effective and robust Design and technology curriculum. Each unit of lessons includes multiple teacher videos to develop subject knowledge and support ongoing CPD. Kapow Primary has been created with the understanding that many teachers do not feel confident delivering the full Design and technology curriculum and every effort has been made to ensure that they feel supported to deliver lessons of a high standard that ensure pupil progression.

D&T is taught every term in every year group throughout the school building on previous knowledge. The D&T units, where appropriate, are linked to other curricular areas giving them real and meaningful purposes. Units are taught weekly.

Impact:

The impact of Kapow Primary's scheme can be constantly monitored through both formative and summative assessment opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives. Pupil's work monitored regularly by the class teachers and meaningful feedback provided in a timely manner. Furthermore, each unit

has a unit quiz and knowledge catcher which can be used at the start and/ or end of the unit. A monitoring and evaluation cycle in place to ensure the highest standards are maintained.

Pupils should leave Bitterley school equipped with a range of skills to enable them to succeed in their secondary education and be innovative and resourceful members of society.

The expected impact of following the Kapow Primary Design and technology scheme of work is that children will:

- Understand the functional and aesthetic properties of a range of materials and resources.
- Understand how to use and combine tools to carry out different processes for shaping, ^[1]decorating, and manufacturing products.
- Build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes, including models, prototypes, CAD, and products to fulfil the needs of users, clients, and scenarios.
- Understand and apply the principles of healthy eating, diets, and recipes, including key processes, food groups and cooking equipment.
- Have an appreciation for key individuals, inventions, and events in history and of today that impact our world.
- Recognise where our decisions can impact the wider world in terms of community, social and environmental issues.
- Self-evaluate and reflect on learning at different stages and identify areas to improve.
- Meet the end of key stage expectations outlined in the National curriculum for Design and technology.
- Meet the end of key stage expectations outlined in the National curriculum for Computing.