

Ripponden J&I School



DT Policy Oct 2022

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Design and Technology Policy

INTENT

In Design and Technology we aim 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. 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. We will use a scheme of work which supports all these aims and enables pupils to meet the end of key stage attainment targets in the national curriculum.

IMPLEMENTATION

All teachers will use the appropriate year group Kapow scheme of work units agreed with the subject leader to enable all pupils to meet the above aims and national curriculum expectations. 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 five subheadings or strands:

- Design • Make • Evaluate • Technical knowledge • Cooking and nutrition

Kapow Primary's Design and technology scheme has a clear progression of skills and knowledge within these five strands across each year group. (See Appendix A)

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 six key areas:

- Mechanisms • Structures • Textiles • Cooking and nutrition (Food) • Electrical systems (KS2) and • Digital world (KS2)

Each of the 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. 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.

CPD

Strong subject knowledge is vital for staff to be able to deliver a highly effective and robust Design and technology curriculum. Teachers are expected to engage with the teacher videos supplied as part of the Kapow scheme of work to develop subject knowledge and support their own ongoing CPD.

Timetabling

Design and Technology and Art will be taught in half term blocks mapped out throughout each year. This gives pupils chance to immerse themselves in the design process in a substantive way and allows tools and resources to be shared efficiently across the school.

Impact

Design and Technology will be constantly monitored through both formative and summative assessment opportunities. End of unit assessments, consisting of a unit quiz and knowledge catcher, may be used at the start as well as the end of the unit to inform of gaps for subsequent planning. After completion of the Kapow Primary Design and technology scheme of work, pupils should leave school equipped with a range of skills to enable them to succeed in their secondary education and be innovative and resourceful members of society. Specifically, 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, 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.

Early Years Foundation Stage

The team will plan for children to experience creative opportunities and develop key skills and techniques within the EYFS curriculum. There will be a focus on developing fine motor skills and learning how to plan, design and produce the finished project. These early experiences will include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products and handling appropriate tools and construction materials safely and with increasing control.

Throughout the Foundation Stage, activities and opportunities are planned where children can learn through talk, play and their own life experiences.

Children in the Foundation Stage will experience a variety of activities including:

- choosing and exploring a variety of materials such as fabric, card, paper, wood, boxes etc;
- learning how to use scissors safely and correctly;
- exploring a variety of joining techniques such as PVA glue, Pritt stick, masking tape, elastic bands, sellotape, treasury tags, split pins, paper clips and string to join materials together;
- taking part in both cooking and non-cook food activities, learning about the importance of food hygiene;
- having opportunities to explore creating models using a wide range of construction kits that fit together in a variety of different ways;
- having opportunities to talk about and explain how they will/have made their model and to discuss what they like/dislike about it;
- folding and shaping paper in order to create a range of structures.

Inclusion

At our school we teach DT to all children, whatever their ability and individual needs. DT implements the school curriculum policy of providing a broad and balanced education to all children. Through our DT teaching we provide learning opportunities that enable all pupils to make progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning English as an additional language, and we take all reasonable steps to achieve this. Support staff should be used to help children who require extra support with this subject and teachers should bare this in mind when planning to support these children.

Resources

The basic resources for each year group are kept in the appropriate classrooms. Specific tools and equipment will be sourced to meet the needs of the scheme of work throughout the year accordingly and logged and stored in a central location by the subject leader.

Health and Safety

In this subject the general teaching requirement for health and safety applies. We teach children how to follow proper procedures for food safety and hygiene. It is the responsibility of the Subject Leader to pass on any relevant Health and Safety information to staff. It is the individual member of staff's responsibility to ensure that they have read, understood and act on this information

Role of the Subject Leader

The role of the Subject Leader is to:

- advise and support staff in planning teaching and learning of DT;
- formulate and carry out an action plan on a yearly basis;
- update the school's policy and Scheme of Work;
- support staff with technique;
- identify and order appropriate resources and monitor and maintain their condition and availability;
- report to the Governing body;
- monitor teachers' planning as part of on-going subject monitoring and evaluation of practice;
- compile a portfolio of children's work to evidence progression and examples of good practice for staff to refer to;
- keep up-to-date on the use of DT in the curriculum and update staff accordingly;
- promote DT throughout the school eg. displays.

Review and Evaluation

Date of Ratification:		Signed: Mrs Lorraine Bamforth (HEAD TEACHER) Mr Stephen Fisher (CHAIR OF GOVERNORS)
Review date:		Signed: Mrs Lorraine Bamforth (HEAD TEACHER)

