



## DESIGN AND TECHNOLOGY POLICY

Garlinge Primary School and Nursery is a place for everyone to succeed and thrive with inclusion at its heart.

### What is Design and Technology?

“Design & Technology plays a fundamental role in combining the academic rigour of Science and Maths with creative problem solving to equip young people with the skills they need to solve big problems.”

Sir James Dyson

*Founder and Chief Engineer at Dyson*

Design and Technology is:

- designing and making **something**;
- for **someone**;
- for some **purpose**.

It involves investigating, planning, evaluating, and using a wide range of materials in different situations. Design and Technology involves learning about the world we live in and developing a wide range of technical knowledge and skills that enable our children to make products that people want and that work well.

Design and technology is a uniquely interdisciplinary subject. It can combine maths, science, history, psychology and art, encouraging real-world application of acquired knowledge and skills. It encourages practical problem solving, collaboration, empathy and creativity as well as both critical and analytical thinking. Most importantly, design and technology inspires young people to be curious, to trust their own ideas, and equips them to explore solutions to the world's biggest problems.

Design and Technology prepares children to deal with tomorrow's rapidly changing world. It encourages children to become independent, creative problem-solvers and thinkers as individuals and as part of a team - making positive changes to their quality of life.

Design and Technology is a practical and valuable subject. It enables children and young people to actively contribute to the creativity, culture, wealth and well-being of themselves, their community and their nation. It teaches how to take risks and to become more resourceful, innovative, enterprising and capable. Students develop a critical understanding of the impact of design and technology on daily life and the wider world. Additionally, it provides excellent opportunities for students to develop and apply judgements of an aesthetic, economic, moral, social, and technical nature both in their own designing and when evaluating the work of others.

## **Rationale**

Each teacher is committed to secure and sustain effective teaching and learning opportunities for each individual child in their class. The quality of teaching and learning and standards of pupil achievement are regularly monitored.

## **The Purpose of Study Statement in the 2014 National Curriculum**

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 acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they 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.

## **Aims**

Design and technology teaching and learning at Garlinge Primary School and Nursery 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.

## **Attainment Targets**

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

## **Subject Content**

### **Early Years Foundation Stage**

Children in our Nursery and Reception are expected to reach a good level of development at the end of the Early Years Foundation Stage. The opportunities provided to reach these Early Learning Goals lay a firm foundation for future learning in Design and Technology.

From Nursery children will be encouraged to:

- Use all their senses in hands-on exploration of natural materials.
- Explore collections of materials with similar and/or different properties.
- Talk about what they see, using a wide vocabulary.

- Show interest in different occupations.
- Explore how things work.
- Talk about the differences between materials and the changes they notice.
- Explore different materials freely, to develop their ideas about how to use them and what to make.
- Develop their own ideas and then decide which materials to use to express them.
- Join different materials and explore different textures.
- Create closed shapes with continuous lines and begin to use these shapes to represent objects.
- Draw with increasing complexity and detail, such as representing a face with a circle and including details.

Throughout Reception children will have opportunities to:

- Explore, use and refine a variety of artistic effects to express their ideas and feelings.
- Return to and build on their previous learning, refining ideas and developing their ability to represent them.
- Create collaboratively, sharing ideas, resources, and skills.

The Early Learning Goals (ELGs) from the Early Years Foundation Stage Statutory Framework indicate what children should know, understand and be able to do by the end of the Reception year and the Early Years Foundation Stage. The following ELGs are linked with Design and Technology:

- Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions (Listening, Attention and Understanding).
- Make comments about what they have heard and ask questions to clarify their understanding (Listening, Attention and Understanding).
- Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate (Speaking).
- Be confident to try new activities and show independence, resilience and perseverance in the face of challenge (Managing Self)
- Manage their own basic hygiene and personal needs, including dressing, going to the toilet, and understanding the importance of healthy food choices (Managing Self).
- Work and play cooperatively and take turns with others (Building Relationships).
- Show sensitivity to their own and to others' needs (Building Relationships).
- Hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases (Fine Motor Skills).
- Use a range of small tools, including scissors, paintbrushes, and cutlery (Fine Motor Skills).
- Begin to show accuracy and care when drawing (Fine Motor Skills).
- Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter (The Natural World).
- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function (Creating with Materials).
- Share their creations, explaining the process they have used (Creating with Materials).
- Make use of props and materials when role playing characters in narratives and stories (Creating with Materials).

Design and Technology also makes a very important contribution to the 'Characteristics of Effective Teaching and Learning' specified in the EYFS Statutory Framework – exploring, active learning, creating and thinking critically.

## **National Curriculum Statutory Requirements for Key Stage 1 and Key Stage 2**

### **Key Stage 1**

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts, such as the home and school, gardens and playgrounds, the local community, industry and the wider environment. When designing and making, pupils are 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 such as 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

#### Develop Technical Knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms, such as levers, sliders, wheels and axles, in their products

### **Key Stage 2**

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment. When designing and making, pupils 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 accurately, such as cutting, shaping, joining and finishing
- 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

### Develop Technical Knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages
- understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs, buzzers and motors
- apply their understanding of computing to programme, 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 afford-ably 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

## **Teaching and Learning Styles**

The school uses a variety of teaching and learning styles in design and technology lessons. The principal aim is to develop children's knowledge, skills and understanding in design and technology. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. We do this through a

mixture of whole-class teaching and individual/group activities. Within lessons, we give children the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources, including ICT.

In all classes there are children of differing ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies:

- setting common tasks that are open-ended and can have a variety of results
- setting tasks of increasing difficulty where not all children complete all tasks
- grouping children by ability and setting different tasks for each group
- providing a range of challenges through the provision of different resources
- using additional adults to support the work of individual children or small groups

### **Inclusion in Design and Technology**

At Garlinge Primary School and Nursery, Design and Technology forms part of the school's policy to provide a broad and balanced education for all children. We take pride in providing an inclusive curriculum for all our pupils. Through our teaching in Design and Technology, we provide learning opportunities that match the needs of children with specific learning needs and those children who are gifted and talented. We consider the targets set for individual children on provision maps or in some cases, their EHCPs (Education, Health and Care Plan) to ensure that all pupils make progress. We do this by setting suitable learning challenges and responding to each child's different needs. Assessment against the National Curriculum allows us to consider each child's attainment and progress against expected levels.

In Design and Technology, we make sure we:

- Set suitable learning challenges for all learners (e.g. able children in Key Stage 1 may be able to use more complex lever and linkage mechanisms normally taught in Year 3 or 4, or children who have difficulty making their own patterns could be supported by choosing from a range of templates to support their learning).
- Respond to children's diverse needs by using a wide range of cultural images and products
- Address gender stereotypes (e.g. female engineers and male fashion designers).
- Actively encourage all children's design ideas and value all suggested ideas.
- Adapt activities and instructions for children with special needs, disabilities and English as an additional language (EAL)
- Encourage all children to achieve as much independence as is compatible with their disability.
- Identify the gifted and talented children and challenge them further (e.g. more open-ended design briefs, adapted design briefs specifying user requirements, planning and carrying out independent research, teaching designing, making and evaluating at a higher level, grouping more able children together to challenge each other's' thinking).
- Provide quality first teaching and use Teaching Assistants to support where necessary.
- Provide suitable and tailored visual support, ranging from task boards to aided language boards or social stories.

Care is taken in planning suitable Design and Technology activities for children with special educational needs and or disabilities; we plan activities that will ensure some success and independence but will not be beyond the child's capabilities and competence. We make sure that children are not put at risk because they have a limited understanding of safety. The following questions are considered:

- Can the child understand very simple instructions and follow them?
- Has the child a physical disability which might affect the safe use of tools?
- Are there holding devices which would make it easier for the child?

## Design and Technology Curriculum Planning

Design and Technology is a Foundation subject in the National Curriculum. At Garlinge Primary School and Nursery, our Design and Technology lessons ensure there is full coverage of all aspects of the National Curriculum and allows for a smooth progression of knowledge and skills within the subject. We use the 'Projects on a Page' scheme of work, developed by the Design and Technology Association (DATA) to support the implementation of the National Curriculum for Design and Technology in an imaginative way. In KS1 and KS2, each half term, there is one Design and Technology project undertaken, covering a particular aspect:

- Mechanisms
- Structures
- Food
- Textiles
- *Electrical systems (KS2 only)*
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General skills used within Design and Technology will continue to be developed throughout the year.

All projects include three types of activity:

- Investigative and Evaluative Activities (IEAs) where children learn from a range of existing products and find out about Design and Technology in the wider world.
- Focused Tasks (FTs) where they are taught specific technical knowledge, designing skills and making skills.
- Design, Make and Evaluate Assignment (DMEA) where children create functional products with users and purposes in mind.

Within each year group, Projects have been planned using the Design and Technology Associations template to ensure that all learning is sequential and progressive so that children are increasingly challenged as they move through the school and are able to build upon their prior knowledge. Where possible, each Project is taught through topics, allowing the children to become fully immersed in their learning.

A star diagram is to be completed for each project to ensure that the principles of Design and Technology are equally covered. The principle are as follows:

- **User** – children should have a clear idea of who they are making the product for.
- **Purpose** – children should be able to communicate effectively the purpose of the product they are making; each product should be designed to perform one or more defined task.
- **Functionality** – children should design and make products that work/function effectively in order to fulfil users' needs, wants and purposes.

- **Design Decisions** – children need opportunities to make their own design decisions. This allows them to demonstrate their creative, technical and practical expertise.
- **Innovation** – when designing and making, children need some scope to be original with their thinking, leading to a range of design ideas and products being developed.
- **Authenticity** – children should design and make products that are believable, real and meaningful to themselves and others.

Within each project, the principles will naturally have varied coverage. Where one principle is lacking in one project, teachers will ensure that there will be a greater focus on it within subsequent projects.

## **Equal Opportunities**

At Garlinge Primary School and Nursery, we are committed to ensuring equality of opportunity for all pupils, staff, parents and carers irrespective of race, gender, disability, religion and belief, sexual orientation, marital status, pregnancy and maternity, age or socio-economic background. We aim to develop a culture of inclusion and diversity in which all those connected to the school feel proud of their identity and ability to participate fully in the curriculum and school life.

## **Assessment and Recording**

Teachers assess children's work in design and technology by making assessments as they observe them working during lessons. This is undertaken three times a year to assess children at an Emerging, Expected or Exceeding level related to their Key Stage expectations (Key Stage 1, Lower Key Stage 2 and Upper Key Stage 2). This is recorded on a spreadsheet taken from the DATA website. They record the progress that children make by assessing the children's work against the learning objectives for their lessons. Children will have a Design and Technology scrap book where they can plan and record their ideas.

## **Monitoring**

The monitoring of the standards of children's work and of the quality of teaching in Design and Technology is the responsibility of the Design and Technology Subject Leader. Their role is to be informed about current developments in the subject and to provide a strategic lead and direction. The work of the subject leader also involves supporting colleagues in the teaching of Design and Technology within the school.

## **Health and Safety**

Our Health and Safety guidance for Design and Technology has come directly from CLEAPPS and DATA; for further information see their websites. The safety and hygiene of the children within each class is the responsibility of the class teacher. Health and safety awareness is a central part of children's learning in Design and Technology; children are taught about hazards and how to recognise them. They are encouraged to consider risks and are supported to develop strategies for risk control.



## **First Aid**

All staff understand the school's procedures for first aid. There is a trained first aider in every department. Each classroom has their own first aid box kept in the grab bag which is replenished regularly. All accidents, however minor, are recorded and reported to our Welfare Officer as per procedure.

## **Classroom Management and Organisation**

Safe working practices in Design and Technology at Garlinge Primary School and Nursery depend on common sense, good management and organisation. The following rules apply to all Design and Technology lessons:

- Teachers and teaching assistants always set a good example of safe practice for children to follow.
- Teachers and teaching assistants always give a clear demonstration of how to use a tool safely and how it should be transported around the room in a safe manner, if necessary.
- Children reminded about using tools and equipment safely.
- Children are encouraged to develop confidence and a sense of responsibility for themselves and other children.
- Tools and materials are organised – untidiness and poor preparation of tools and equipment can create hazards.
- Children are encouraged to keep their work area organised and to collect and return tools safely and systematically, when necessary.
- Clearly identified workstations are set up for the use of tools such as low melt glue guns, craft knives and junior hacksaws (KS2).
- Clearly stated rules about safe practice are provided; children are clear about the distinction between tools for general use and those which can only be used under direct supervision.
- Unnecessary movement of children around the room is discouraged.
- Correct levels of supervision are adhered to.
- Children only use the tools and equipment appropriate for their age group, maturity, behaviour and ability.
- We count all potentially risky tools and equipment (low melt glue guns, junior hacksaws, craft knives, vegetable knives, sewing needles, fabric scissors, vegetable peelers and graters) before the lesson and again when they have been handed in.
- Even if children have used them before, we always start our lessons with a reminder of how to use the tools and equipment safely.

## Supervision Required During Design and Technology

The following exemplifies what the levels of supervision mean. It is based on a 'standard' class with a reasonably experienced teacher. However, every class and its children are different, and all teachers decide the level of supervision needed (but not exceed) based on:

- Complexity and hazardousness of the activity
- Maturity of the class
- The children's mood and behaviour, which can be influenced by the time of day, day of the week, previous or succeeding lesson, weather, etc.
- The previous experience and expertise of the children

Supervision Terminology	Ratio	Equipment
<b>Very close supervision</b>  Needed when there are significant risks of accident and injury.	One child to one adult	Using the following for the first time: <ul style="list-style-type: none"> <li>• junior hacksaw (KS2)</li> <li>• low melt glue gun (KS2)</li> <li>• sharp knife (Year 5/6)</li> <li>• oven (KS2)</li> <li>• hob (Year 5/6)</li> </ul>
	Two children to one adult	Using the previous after being assessed as mature and skilled enough.
<b>Close supervision</b>  Needed when there are risks of accident, but these are predictable.	Small group (up to 6) children to one adult	Using the following for the first time: <ul style="list-style-type: none"> <li>• plastic sewing needle (KS1)</li> <li>• metal sewing needle (KS2)</li> <li>• fabric scissors (KS2)</li> <li>• round-ended knife (KS1 &amp; KS2)</li> <li>• vegetable peeler (KS1 &amp; KS2)</li> </ul> Using a low melt glue gun after being assessed as mature and skilled enough (KS2) Using a blender (KS1 & KS2)
<b>Moderate supervision</b>  Needed where the risks of an accident or injury are well controlled.	10-15 children to one adult.	Using the following for the first time: <ul style="list-style-type: none"> <li>• grater (KS1 &amp; KS2)</li> </ul> Using a sewing needle, fabric scissors, round-ended knife and vegetable peeler after being assessed as mature and skilled enough.  Using multiple blenders at a time after being assessed as mature and skilled enough (KS2)

With practise, children will develop skills and therefore competency, which means the level of supervision could be decreased. Only their teacher will know when to reduce supervision. It is also essential that the teaching assistant is also competent and capable of carrying out the required level of supervision. Meeting before the lesson to jointly trial and plan the activity is by far the most effective way of doing this.

If during the planning we realise that we cannot provide a suitable level of supervision for the class, we make one of these choices:

- Modify the planning so that we can work with a manageable group while the rest of the class carry out a related task or project-based planning
- Postpone the activity until a suitable level of supervision can be arranged
- The activity is not done at that time

### **Using sewing needles (KS1 and KS2)**

- Plastic sewing needles are used in KS1 for sewing loosely woven materials such as binca and felt. They are large, easy to hold and manipulate and are less likely to break the skin if a child pricks themselves.
- Metal sewing needles are used in KS2; a longer length general purpose needle is easier to manage, which reduces the risk of pricking injuries.
- Thimbles are to be worn when using metal sewing needles until fully competent.

### **Using vegetable peelers (KS1 and KS2)**

- We use a 'Y' shaped peeler because they are safe and easy for young children to hold and use; however the blade is sharp and children can cut themselves.
- Vegetable cleaners are only cleaned by adults.
- Peeling safety aids (sweetcorn holders) can be used when required.

### **Using graters (KS1 and KS2)**

- We use box graters; we make sure that children's fingers do not get too close to the grater to avoid any abrasions.
- Graters are only cleaned by adults.

### **Using microwaves (KS1 and KS2)**

- Microwaves can be used by teachers in a primary classroom.
- Primary school children should not use a microwave.
- Use only microwave safe cookware in a microwave.
- All food, especially liquids, can be scalding hot when they come out of a microwave – allow adequate cooling time before touching or eating any food.

### **Using vegetables knives (KS2)**

- Vegetable knives are kept sharp to ensure that they are safe to use; only adults sharpen knives.
- Vegetable knives are only cleaned by adults.
- Cutting safety aids (steel cutting guards or onion holders) can be used when required.
- Vegetable knives are stored in a secured place where only adults have access.
- Children are not allowed to walk around whilst carrying a vegetable knife.
- Children are taught relevant cutting techniques for safety (bridge hold, claw cut).

### **Using the oven (KS2)**

- Only KS2 are directly involved in using an oven independently.
- Children are taught to stand back when an oven door is opened to avoid blasts of hot air.

- Children can use oven gloves when accessing the oven and when handling hot food and utensils.

### **Using the hob (Upper KS2)**

- Gas hobs are not used with primary school children.
- When using a hob, children should be able to look down at what they are cooking and not have to overreach.
- We teach children that, after any type of hob has been turned off, rings and plates may no longer be visibly hot but have yet to cool down.
- Position pan handles to reduce the chance of them being accidentally knocked.
- Guard against scalds from steam when lifting a saucepan lid.

### **Using fabric scissors (KS2)**

- Fabric scissors are kept solely for cutting fabrics; this ensures that the blades have not been blunted by paper and card.

### **Using electronics (KS2)**

- Electrical equipment is checked before and after use; faulty equipment is withdrawn and the Design and Technology Subject Leader is notified.
- Children are always warned about the dangers of using electricity.
- Children are taught how to avoid making short circuits (short circuit happens if children directly connect the + and – terminals of the battery with a single wire).
- Light emitting diodes (LEDs) that have an internal resistor are used.
- Electrical components and batteries match, e.g., 1.5v bulb with a 1.5v battery.
- Zinc carbon or zinc chloride batteries are used when children are exploring and designing and making circuits (1.5v AA batteries are the safest to use in the primary classroom; children cannot get an electric shock from these unless a great many are joined together).
- Dedicated battery holders are used.
- Batteries are stored so that their terminals cannot touch or short circuit.
- Annual PAT testing is carried out in January to ensure the safety of portable electrical items in school.
- We remove batteries from equipment that remain unused for long periods of time, e.g., months or more.
- If a leaky battery is identified, we wear disposable gloves and eye protection, then carefully remove the battery and put it in a sealable clear plastic bag for disposal labelled 'leaking zinc chloride battery'. We use dampened kitchen-roll paper to remove the leaked material and put this into the bag with the battery. When all the leaked material has been cleaned up, we seal the bag and talk to our site manager about disposal.

### **Using glue guns (KS2)**

- We use high-quality low-melt glue guns.
- Low-melt glue guns and sticks work at a lower temperature but must still be used with caution as they will still burn (~130°C)
- A glue gun mat is used to protect furniture; our glue-guns have an inbuilt stand.
- Glue guns are used in a dedicated area.

- Children are not allowed to push the glue sticks further into the glue gun with pencils etc.
- The correct use of the glue gun is demonstrated – the nozzle is held slightly above the material to be glued (the nozzle gets blocked when children try to squeeze the glue out and the nozzle is pressing on the material).
- The glue gun is only used when there are no alternative methods.
- Before using a glue gun, we give it enough time to fully heat up, which ensures that the glue at, and on, the tip is melted and runs freely (a good indication of this is if some glue drips out of the nozzle). If the glue is not fully melted it requires greater force on the trigger to push it out of the nozzle, running the risk of the glue spluttering as it is suddenly released. If the trigger is hard to squeeze, we wait for a couple of minutes to allow the glue to melt. The melted glue is very hot at this point and takes several minutes to cool. We keep fingers, and skin in general, away from the hot glue during this period.
- We use the correct glue gun stick in a compatible glue gun.
- If the glue gun stick is very long, we cut them to a manageable size for children to use.
- We never site mains electrical equipment, such as a glue gun, near water.
- We check for faulty leads and plugs on glue guns, before and after use.

#### **Using craft knives (Year 5/6)**

- Craft knives are stored securely when not in use.
- We always use a safety ruler and a cutting mat when using a craft knife.
- We assess that children are competent with a safety ruler prior to using craft knives.
- Craft knives are only used when no alternative method is available. For example, when cutting strips of card, a paper trimmer is more appropriate.
- Craft knives are only issued at the teacher's discretion.
- We teach children to always cut away from the body or hand holding the safety ruler.
- If children are cutting thick card, we teach them to make several light cuts with a knife rather than one heavy cut.

#### **Using seam rippers (Year 5/6)**

- We make sure that the blade is pointing away from the user's body and away from other people.

#### **Using junior hacksaws and benches (Year 5/6)**

- We use junior hacksaws with disposable metal cutting blades (with small teeth).
- Our junior hacksaws have a pistol grip which gives the user better control.
- Children are taught to draw the saw back a couple of times to create a guide notch for sawing. We encourage the child to rest their index finger along the saw (pistol grip). The pointed finger helps with accuracy and reduces side to side movement.
- Hacksaws are safer with sharp blades; we check for blunt blades regularly and discard appropriately.
- Changing the blade on a junior hacksaw is always done by an adult. We always ensure that saw blades are securely fitted into the handles.
- We use a holding device (work bench) when cutting wood.

- Children are reminded about the danger of blowing sawdust when working with wood – as it could blow into their own or someone else's eyes; suitable eye protection is to be worn.
- Junior hacksaws are to be stored in the saw block whilst in the classroom and not in use.
- Junior hacksaws are stored securely when not in use.
- COSHH assessment is not needed for the use of a hacksaw for cutting square section wood.

### **Using sandpaper (Year 5/6)**

- Sandpaper is used by children to smooth and shape wood.
- Sanding produces a fine dust which can get into eyes and cause irritation; to keep dust levels down, we don't have large groups of children sanding at the same time and suitable eye protection is worn.
- COSHH assessment is not needed for light sanding.

All staff will have read the relevant risk assessments before using equipment. Copies of risk assessments can be found in the class Design and Technology folder, within the storage of the equipment itself or on our shared IT system.

### **Food Hygiene and Safety**

The Design and Technology Subject Leader will have achieved the Level 2 in Food Safety in association with CIEH (Chartered Institute of Environmental Health) in order to oversee safe and hygienic cooking procedures are followed within the school. At Garlinge Primary School and Nursery, we ensure that children prepare and cook safely and hygienically.

We will ensure that we are aware of allergies and understand that some children choose to avoid some types of food because they are:

- Particularly sensitive to certain food items and can become ill after eating products which are harmless to most other people.
- Allergic and reactions can occur within minutes of eating just a small amount of food or ingredient and may prompt an anaphylactic reaction, which can be life-threatening.
- Intolerant, with the inability to digest foods such as eggs, gluten and dairy products.
- Prohibited for religious or cultural reasons.

### **Purchasing food for our lessons:**

- We choose unblemished, un-bruised fruit and vegetables; we check use-by or best-before dates on pre-packed soft fruits.
- Food is brought into school on the day it is to be used.
- Perishable foods bought are then stored in the school's refrigerator, at the correct temperature.

### **Clothing**

- Aprons used for food work are kept specifically for that purpose and washed regularly.
- Children's sleeves are rolled to the elbow.

## **Personal Hygiene**

- For all food activities, including sensory analysis, it is important to maintain high standards of personal hygiene.
- We know that staphylococcus aureus (pathogenic bacterium) is frequently found in the mouth, nose, ears and on the skin (hair also contains bacteria) so we do not touch these areas whilst cooking. If we do, we wash our hands thoroughly.
- Food is not prepared by anyone who is suffering from heavy colds, sickness, diarrhoea or any other infection.
- Existing cuts and wounds are covered with clean waterproof dressings to avoid contamination.
- Hands are properly washed before, during and after work with food, following the correct handwashing guidance.

## **Preparing to cook**

- PVC tablecloths that are used only for cooking lessons.
- Fruits and vegetables are washed thoroughly before use to remove any trace of chemicals or soil.
- Chopping boards are labelled for use for specific types of food.
- Food is not left out uncovered for a prolonged period of time.

## **Food tasting**

- Children do not share food tasting equipment.
- Children are not allowed to dip their fingers into a food sample or to lick a food which is to be tasted by other people.
- An individual clean teaspoon is used for tasting and it is washed up immediately.

## **Cleaning**

- We know that pathogenic bacteria can be easily spread around the food preparation area via our hands, chopping boards, dishcloths, tea towels, utensils and equipment, so good kitchen hygiene and personal hygiene are vital to help control the spread of these bacteria.
- Work surfaces are cleaned before, during and after all food activities.
- A “clean as you go” routine is used and taught to the children.
- After use, all equipment and utensils are washed with hot water and washing up liquid. The water is changed regularly. Washed items are then rinsed in clean, hot water. Where possible, items are left to drain and air dry.
- Tea towels can be a source of cross-contamination and therefore they are changed regularly and washed in a hot wash cycle.