DESIGN AND TECHNOLOGY POLICY

DESIGN AND TECHNOLOGY Policy 2017/18- Document Status			
Date of Policy Creation	Oct 2017	**Chairman of Governing Board**	Alan Smith
Date of review to be completed by	October 2019 (2 years)	**Teacher responsible for Design and Technology**	Alyson Guest
Inception of new Policy	February 8th 2018	**Federated Headteacher**	Denise Garner
Date of Policy Adoption by Governing Body		7th February 2018	

Love, Laugh, Learn'

Respect, Resourcefulness, Resilience, Reciprocity, Reflectiveness

INTRODUCTION

Design and technology, (D&T), is about evaluating, designing and making products for a specific need or purpose. It involves children learning about the world we live in and developing a wide range of skills through designing and making. Design and technology encourages pupils to learn to think and intervene creatively to solve problems both as individuals and as members of a team. They are taught to look for opportunities and to respond to them by developing a range of ideas and making a range of products. They reflect on and evaluate present and past design and technology, its uses and its effectiveness. They are encouraged to become innovators.

DESIGN AND TECHNOLOGY AIMS:

- To increase pupils awareness of and the importance of design and technology in our lives.
- To develop technological capability of all children in order to design and make products within a meaningful context.
- To fulfil the requirements of the Early Years Foundation Stage Curriculum and the National Curriculum for Key stage 1.
- To encourage attitudes of collaboration, co-operation and respect
- To make all children aware of aspects of health and safety
- To develop the children's use of correct technological language, extending their vocabulary through talking and explaining their designing and making activities
- To develop a sense of enjoyment and pride in their ability to make
- To nurture creativity and innovation through designing and making
- To develop pupils curiosity and interest in the man-made world through investigating, talking and asking questions about familiar products
- To develop pupils confidence and enthusiasm through frequent exploration of construction kits to build and construct objects and activities for exploring joining, assembling and shaping materials to make products

DESIGN AND TECHNOLOGY - THE EARLY YEARS FOUNDATION STAGE

The statutory Early Years Foundation Stage, (EYFS), framework for England clearly identifies the role of design and technology in young children's learning and the subject is specifically named in the area of learning 'Expressive arts and design'.
The early learning goals for expressive arts and design indicate what children should know, understand and be able to do by the end of the reception year. A significant proportion of this learning is delivered through high quality D&T experiences and activities, enabling children to:

- safely use and explore a variety of materials, tools and techniques
- experiment with colour, design, texture, form and function
- use what they have learnt about media and materials in original ways, thinking about uses and purposes.

D&T also makes an important contribution to children's learning across the remaining six areas of the EYFS framework:

- Understanding the World
- Physical Development
- Literacy
- Mathematics
- Personal, Social and Emotional Development
- Communication and Language.

Many D&T experiences in the EYFS take place during child-initiated learning. Structured, exploratory play occurs on a daily basis and through this children become involved in the technological process. They have the opportunity to work collaboratively and individually, responding to open ended questions posed by adults.
At this early stage talking with the children about their activities is a valuable way to take the children's thinking and learning further.

The children's experience of D&T in the EYFS includes:

- Talking about what is happening and why
- Trying things out and relating cause with effect
- Designing by talking about what they intend to do, are doing and have done
- Saying who and what their products are for
- Drawing what they have made, and drawing their ideas before they make
- Opportunities to make their own choices and to discuss the reasons for these
- Learning procedures for safety and hygiene
- Developing practical skills and techniques using a range of materials including food, textiles and construction materials
- Developing their knowledge and understanding in relation to mechanisms, structures, food and textiles
- Exploring and using a range of construction kits
- Asking questions about a range of existing products
- Exploring the designed and made world through the indoor and outdoor environment, and through role play
- Learning and using appropriate technical vocabulary

- Making products within a given context
- Expressing likes and dislikes about what they have made
- Evaluating throughout an activity

PLANNING - EYFS

Effective learning builds on and extends what children know and can already do. Our planning is informed by observations made of the children in order to understand and consider their current interests, experiences, development and learning needs.

There are three stages of planning the curriculum:

Long Term Planning
The curriculum in the EYFS is organised through agreed termly themes over the period of the academic year. The Early years outcomes and the schools EYFS planning matrix is used as guidance. Design and technology activities are incorporated into each theme through continuous provision and planned design and make activities related to the theme.

Medium Term Planning
Particular aspects of the curriculum are addressed in more detail at the medium term planning stage. Learning objectives, assessment opportunities, activities and experiences for design and technology are planned within the expressive arts and design area of learning.

Short Term Planning
Weekly planning for design and technological activities is informed in two ways. Firstly, through ongoing observation of child initiated, adult initiated and adult directed activities both indoors and outdoors. This allows for flexibility in response to individual children's needs and interests and for revision and modification of plans. It is informed secondly by referring to the objectives in the medium term plans.

ASSESSMENT - EYFS

Formative assessment in expressive arts and design informs everyday planning and is based on on-going observational assessment of each child's achievements, interests and learning styles. It takes the form of planned, or significant, observations, targeted assessments and annotated examples of work. Photographs and information from parents are also used. An observational assessment cycle is planned during the medium term planning stage.
Formative assessment is used to plan future learning. Children's next steps in learning are identified and individual target boards are completed. This information is used to plan future learning in expressive arts and design and used to identify and support effectively those pupils who start to fall behind, so that they quickly catch up.
Observations are placed in children's individual '*Look what I can do'* folders which are shared with parents each term and also form the basis of our annual reports.

Summative assessment - Children's progress in expressive arts and design is tracked termly by highlighting children's individual pupil profiles.
At given point(s) in each term, information from the child's profile is summarised. This summary indicates if children are beginning, developing or secure, in expressive arts and design, within an age and stage band from the early year's foundation stage curriculum. Moderation of these assessments within school, and clusters of schools, frequently takes place so that summative

assessment is accurate. Teachers use summative assessment to plan future learning so that all children make good progress and achieve well.

The children are able to build upon their prior learning in the EYFS when they begin the KS1 programme of study which covers the different aspects of design and technology. Learning in the EYFS is built upon through projects in KS1. (See table below).

DESIGN AND TECHNOLOGY LEARNING IN THE EYFS This learning is built upon in D&T projects in KS1	
SLIDERS AND LEVERS	• Experienced working with paper and card to make simple flaps and hinges. • Experienced simple cutting, shaping and joining skills using scissors, glue, paper fasteners and masking tape.
FREE STANDING STRUCTURES	• Experienced using construction kits to build walls, towers and frameworks. • Experienced using basic tools e.g. scissors or hole punches with construction materials e.g. plastic, card. • Experienced different methods of joining card and paper
PREPARING FRUIT AND VEGETABLES	• Experienced common fruit and vegetables, undertaking sensory activities i.e. appearance taste and smell. • Experienced cutting soft fruit and vegetables using appropriate utensils.
TEMPLATES AND JOINING TECHNIQUES	• Explored and used different fabrics. • Cut and joined fabrics with simple techniques. • Thought about the user and purpose of products
WHEELS AND AXLES	• Assembled vehicles with moving wheels using construction kits. • Explored moving vehicles through play. • Gained some experience of designing, making and evaluating products for a specified user and purpose. • Developed some cutting, joining and finishing skills with card.

DESIGN AND TECHNOLOGY - KEY STAGE 1

Design and technology is a statutory subject of the National Curriculum and states what pupils should be taught in KS1. In D&T there are two strands of subject content:

1. designing and making
2. cooking and nutrition

By the end of key stage 1, pupils are expected to know, apply and understand the matters, skills and processes specified in the KS1 programme of study.

The National Curriculum for pupils in KS1 states the following in the programme of study:
When designing and making, 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

The National Curriculum for pupils in KS1 states the following in the programme of study:

Cooking and Nutrition:

'As part of their work with food, pupils are taught how to cook and apply the principles of nutrition and healthy eating. 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:

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from

THE PROCESS OF DESIGNING AND MAKING

At the heart of our teaching and learning in D&T is the designing and making process.
Children combine their designing and making skills with their knowledge and understanding when they are designing and making products. (See table on Page 7))

	The process of Designing and making - Across Key Stage 1 pupils:
Designing	
Understanding contexts, users and purposes	• work confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment • state what products they are designing and making • say whether their products are for themselves or other users • describe what their products are for • say how their products will work • say how they will make their products suitable for their intended users • use simple design criteria to help develop their ideas
Generating, developing, modelling and communicating ideas	• generate ideas by drawing on their own experiences • use knowledge of existing products to help come up with ideas • develop and communicate ideas by talking and drawing • model ideas by exploring materials, components and construction kits and by making templates and mock-ups • use information and communication technology, where appropriate, to develop and communicate their ideas
Making	
Planning	• plan by suggesting what to do next • select from a range of tools and equipment, explaining their choices • select from a range of materials and components according to their characteristics
Practical skills and techniques	• follow procedures for safety and hygiene • use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components • measure, mark out, cut and shape materials and components • assemble, join and combine materials and components • use finishing techniques, including those from art and design
Evaluating	
Own ideas and products *could be improved*	• talk about their design ideas and what they are making • make simple judgements about their products and ideas against design criteria • suggest how their products could be improved
Existing products	• explore what products are • explore who products are for • explore what products are for • explore how products work • explore how products are used • explore where products might be used • explore what materials products are made from • explore what they like and dislike about products
Technical Knowledge	
Making products work	• know about the simple working characteristics of materials and components • know about the movement of simple mechanisms(levers, sliders, wheels axles) • know how freestanding structures can be made stronger, stiffer and more stable • know that a 3-D textiles product can be assembled from two identical fabric shapes • know that food ingredients should be combined according to their sensory characteristics • know the correct technical vocabulary for the projects they are undertaking
Cooking and Nutrition	
Where food comes from	• know that all food comes from plants or animals • know that food has to be farmed, grown elsewhere (e.g. home) or caught
Food preparation, cooking and nutrition	• know how to name and sort foods into the five groups in The eat well plate • know that everyone should eat at least five portions of fruit and vegetables every day • know how to prepare simple dishes safely and hygienically, without using a heat source • know how to use techniques such as cutting, peeling and grating

At Wrockwardine Wood Infant School and Nursery we recognise there are six essential elements to design and technology projects.

1. **User –** children have a clear idea of who they are designing and making products for, considering their needs, wants, interests or preferences. The user may be themselves, an imaginary character, another person, client, consumer or a specific target audience.

2. **Purpose** – children know what the products they design and make are for. Each product performs a clearly defined task that can be evaluated in use.

3. **Functionality** – children design and make products that function in some way to be successful. Products often combine aesthetic qualities with functional characteristics. We recognise that in D&T, it is insufficient for children to design and make products which are purely aesthetic.

4. **Design Decisions** – when designing and making, children have opportunities to make informed decisions such as selecting materials, components and techniques and deciding what form the products will take, how they will work, what task they will perform and who they are for.

5. **Innovation –** when designing and making, children have scope to be original with their thinking. Projects are planned that encourage innovation, lead to a range of design ideas and products being developed. These projects are characterised by engaging, open-ended starting points for children's learning.

6. **Authenticity** – children design and make products that are believable, real and meaningful to themselves i.e. not replicas or reproductions or models which do not provide opportunities for children to make design decisions with clear users and purposes in mind.

At Wrockwardine Wood Infant School and Nursery we use a scheme of work called **'Projects on a Page'** to plan D&T. The scheme consists of project planners that support the implementation of the National Curriculum for D&T in an imaginative way. The project planners have the designing and making process, as outlined in the National Curriculum programmes of study, as their core and the six essentials, outlined above, are embedded into each project.
This scheme of work ensures children design, make and evaluate products using the broad range of materials and components specified in the National Curriculum statutory requirements. These include construction materials, textiles, food, and mechanical components.

At Wrockwardine Wood Infant School and Nursery we recognise that there are 3 types of activity through which children develop their design and technology capability. These three types of activity are outlined below:

- **Investigative and Evaluative Activities (IEAs)** where children learn from a range of existing products and find out about D&T in the wider world;
- **Focused Tasks (FTs)** where children 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.

Through IEAs and FTs children are equipped with the knowledge, understanding and skills to engage successfully and with increasing independence in a DMEA.
IEAs and FTs do not have to be followed in sequence and we recognise that it is good practice to dip in and out of these activities to meet children's needs.

PLANNING DESIGN AND TECHNOLOGY – KS1

LONG TERM PLANNING

To ensure children receive the breadth of learning required by the National Curriculum and to increase their knowledge, understanding and skills over time, we have devised a long-term plan that:

- fulfils the requirements of the National Curriculum programmes of study

- matches projects with termly themes so that links can be made with related learning in other subjects
- addresses a particular aspect of D&T each term (At KS1 mechanisms, structures, food and textiles)
- Builds the requirements for 'cooking and nutrition' into projects on food

LONG TERM PLANNING MATRIX

	AUTUMN	SPRING	SUMMER
YEAR 1	**TEXTILES** Templates and joining techniques Theme: From Wood to Wool	**FOOD** Preparing fruit and vegetables (including cooking and nutrition requirements for KS1) Theme: Greenfingers	**MECHANISMS** Sliders and Levers Theme: Hooray..Let's Go On Holiday
YEAR R/1	**TEXTILES** Templates and joining techniques Theme: Let's Pretend	**FOOD** Preparing fruit and vegetables (including cooking and nutrition requirements for KS1) Theme: Changes	**MECHANISMS** Sliders and Levers Theme: Hooray..Let's Go On Holiday
YEAR 2	**STRUCTURES** Free standing structures Theme: The Magic Toymaker	**FOOD** Preparing fruit and vegetables (including cooking and nutrition requirements for KS1) Theme: Earth – Our Home	**MECHANISMS** Wheels and Axles Theme: From A to B

MEDIUM TERM PLANNING – KS1

At our school we have decided to block our design and technology work over 1-2 weeks. We feel a concentrated period of time involving FT's, IEA's and a DMEAs is a more effective use of available time.

At the medium term planning stage teachers are aware of the aspect of work, and the key ideas to be developed, from the long term planning matrix. The scheme of work 'projects on a page' is used where the key learning, resources and specific vocabulary related to the project is stated. Also possible contexts, users, purposes, cross-curricular links, health and safety considerations are also listed. Possible FT's, IEAs and the DMEA are also shown.

SHORT TERM PLANNING – KS1

Using the medium term planning 'projects on a page' teachers plan and position where and what FT's and IEA's will be used, and outline the design, make, evaluate assignment, on our weekly planning grid.
An open-ended question or design problem, usually provided by the teacher, outlines the context for the designing and making assignment. For children to understand the context for their project, teachers give them an overview of what they will be designing, making and evaluating before they undertake any activities.

ASSESSMENT – KS1

Teachers, and other supporting adults, assess pupils design and technological capability through:

- Interactions
- questioning
- responding to pupils recoded work and products
- on-going observations
- discussions between staff working with groups of pupils

This formative assessment is used by teachers, other supporting adults, and children, to measure the childrens skills, knowledge and understanding in design and technology and supports the planning of what the most appropriate next steps will be.

Assessment of the key skills in design and technology are completed at the end of a unit of work, throughout KS1, and are used by teachers to assess the skills children have mastered and to plan future learning.

REPORTING TO PARENTS

Early Years Foundation Stage and Key Stage One

In the summer term an individual written report is completed by teachers for parents of Reception, Year 1 and Year 2 children, communicating their child's progress and attainment in expressive arts and design, (EYFS), and design and technology, (KS1). Teachers write their comments using assessments and in relation to national expectations. Individual targets for the next academic year are also communicated in the annual report to parents.

THE USE OF CONSTRUCTION KITS FOR DESIGN AND TECHNOLOGY.

At our school we acknowledge the value of construction kits in developing children's design and technology capability.

Construction kits can be used for individual, group, or whole class activities for a variety of purposes:

- Free exploration.
- Problem solving activities.
- Structures investigation.
- Designing and making.
- Demonstration of a concept.
- As a starting point for an aspect of work.
- As a way to communicate ideas
- As a prototype for a DMEA assignment

The following table shows how construction kits can be used to develop children's design and technology capability.

SKILLS	KNOWLEDGE AND UNDERSTANDING	VOCABULARY
Manipulative skills Working independently Working collaboratively Sequencing Following writing or drawing instructions Modelling ideas Planning skills Investigative skills Problem solving skills	Methods of construction, e.g. walls, frameworks, different methods of fixing Mechanisms: moving joints, different types of movement, different types of mechanisms to control movement, e.g. wheels/axles Structures: how to make structures stable, strengthening and reinforcing structures, testing structures, structures for different purposes	When talking with adults and other children a range of vocabulary can develop when using construction kits, e.g. positional language - behind, next to, on top, in front.
DMEA's	**FT's**	**IEA's**
Using a construction kit to design and make a machine for a particular purpose. Making a house that will not blow down for the 3 Pigs. Using a construction kit to model ideas before making with construction materials, e.g. a 'model' of a bridge.	Using construction kits to teach specific skills and concepts, e.g. using a framework or wooden blocks to investigate what makes a structure stable and strong. Using a simple construction kit to practise planning skills.	Investigate construction kits to find out about different types of movement.

SPECIAL EDUCATIONAL NEEDS

At our school we are aware of the importance of planning work that matches all children's needs, and therefore helps them to make progress in design and technology.
Certain knowledge, skills and understanding may need further consolidation for some children to gain accuracy and quality. We ensure that opportunities for this are provided so that all children make good progress within D&T.

HEALTH AND SAFETY

Design and technology is a very practical subject, involving a range of tools and materials. For children's design and technology capability to progress we encourage them to become increasingly independent with their choice and use of tools and materials. It is therefore imperative that children are taught the correct, safe use of tools, and that any potential hazards are discussed with them so that they have a growing awareness of health and safety issues.

In our school we have a publication called 'Shropshire Primary Design and Technology'. It outlines the tools we have in our school, common misuses of them, and the correct way to teach how to use them is also clearly indicated. Teachers refer to this document prior to teaching a new skill.

We have assessed the risks of tools and equipment we have in our school.
Our decisions and comments have formed a risk assessment document. (See Appendix 1) This document is attached to the technology trolley(s) so that it is accessible to all who may be teaching or supporting design and technology activities.

HEALTH AND SAFETY - WORKING WITH FOOD

A form for parents to give permission for their child to take part in food tasting activities is completed when children enter school so that teachers are aware of any food allergies/risks.

CARRYING OUT A FOOD TEST.

We ensure:

- parents of children with special dietary needs are contacted before food testing takes place
- children have washed their hands
- food tasting takes place in a clean area that has been wiped with antibacterial cleaner
- each child is provided with a spoon or cup
- each child is provided with a paper towel to spit out unwanted food
- food is disposed of safely

A PROGRESSION IN TASTING SKILLS.

1. Do you like it or not? (Yes/No answers).
2. Which do you like the best? (Begin to sort out choices).
3. How much do you like them? (Give scores).
4. Use a bank of words to describe the food/drink.

An example of a word bank is shown below:

FOOD TECHNOLOGY - Tasting and Evaluating: Developing Vocabulary

APPEARANCE	**SMELL -** Aroma	**TASTE -** Flavour	**TEXTURE -** Mouthfeel	
Dark Pale Bright Dull Firm Runny Lumpy Sticky (Glutinous) Greyish	Roasted Sweet Sour Floral Rancid Burned	Fruity Salty Spicy Sweet Acidic Bitter Vanilla Beef flavour Lamb flavour Pork flavour Aftertaste	Tender Juicy Soft Crunchy Chewy Crispy Hard Soft Sticky	Lumpy Greasy Stringy Smooth Creamy Gritty Grainy Cloying Slimy
Hedonic Descriptors: Feelings towards a product		**Attitudinal Descriptors:** Beliefs and values		
Delicious Appetising Tasty Appealing Disgusting Preferred Moorish Enjoyable Pleasant		Comforting Energising Satisfying Invigorating Wholesome Healthy		

MONITORING AND EVALUATION

The Head teacher and subject leader(s), take responsibility for monitoring and evaluating teaching and learning in design and technology. The Governing body review the policy for design and technology every 3 years.

ROLE OF SUBJECT LEADER

The Head teacher and subject leader(s) monitor the quality of teaching and learning in design and technology. Monitoring occurs in different ways and subject leaders decide the appropriate form of monitoring and actions as necessary:

- Learning Walks
- Lesson observations
- Moderation - Work with colleagues to improve standards
- Support teachers with planning and assessment
- Scrutiny of planning, work and products
- Pupil interviews: discuss learning which has taken place and targets they are working on.
- Analysing standards using observations and assessments.
- Plan and deliver effective CPD to improve standards

Appendix 1 - RISK ASSESSMENT

Food Equipment

	Risk Assessment of **Design and Technology tools and materials**	**Business Unit/ School: WROCKWARDINE WOOD INFANT SCHOOL AND NURSERY**	**Portfolio: EDUCATION**		**Carried out by: Alyson Guest**		
Date: November 2017		**Review date:** October 2020	**Specialist assessment needed****				
What is the tool, equipment or material?	**What are the hazards? Who might be harmed and how?**	**What are we already doing?**	**Risk rating* L,M or H**	**What further action is necessary?**	**By whom?**	**By when?**	**Done**
Food equipment							
Plastic implements	Cutting skin from plastic snapping	Adult support to ensure tool is being used correctly and children taught to talk with an adult if implement is cracked or snaps.	L				
Wooden implements	Bacterial growth	Cracked wooden implements will be discarded immediately.	L				
Chopping boards	Contamination	Colour coded boards for meat, vegetables and bread.	L				
Vegetable peeler	Cutting skin	Adult support to ensure tool is being used correctly.	L				
Vegetable paring knife	Cutting skin	Adult support to ensure tool is being used correctly.	L				
Graters	Cutting skin	Adult support to ensure tool is being used correctly.	L				
Electric hand mixers	Electric shock Fast rotating blades cutting fingers/skin	Adult use only	L				
NB All electrical equipment to be electrically tested annually.							

What is the tool, equipment or material?	What are the hazards? Who might be harmed and how?	What are we already doing?	Risk rating * L,M or H	What further action is necessary?	By whom?	By when?	Done
Induction hob	Heat – Burns	Adult supervision due to heat of pan and contents. Ensure rings and watches are removed.	M				
Microwave oven	N/A	Not appropriate for the children to use.	L				
Conventional oven	Heat - Burns	Children to be kept a safe distance away. Cooker fitted with safety rail.	L				
Hand & balloon whisk	Catching fingers	Adults to model how to use whisks, holding them correctly.	L				
Plasters	Plasters falling into food ingredients.	Only blue plasters to be used.	L				
Textiles equipment and materials							
Pins	Sharp cuts. Swallowing.	Children shown the correct way to use, i.e. not in mouth. Pin away from the body.	L				
Bodkins – Flexible plastic	Biting the end and swallowing.	Children taught the care of the tool.	L				
Needles for hand sewing	Sharp punctures to the skin.	Occasionally used after careful demonstration and explanation.	L				

What is the tool, equipment or material?	What are the hazards? Who might be harmed and how?	What are we already doing?	Risk rating* L,M or H	What further action is necessary?	By whom?	By when?	Done
Textiles equipment and materials							
Fabric crayons	Toxicity	Ensure that crayons used do not have any form of toxicity.	L				
Fabric pastels	Toxicity	Ensure that pastels used do not have any form of toxicity.	L				
Sequins	Cuts from sharp edges	Make children aware of sharp edges.	L				
Beads	Swallowing Putting up nostrils	Careful monitoring. Increase children's awareness of dangers.	L				
Batik pots	Burns	Adult supervision due to heat of metal rim. Only two children to use at any time.	L				
Tjanting tool	Burns from dripping wax	Adult supervision due to use of hot wax. Only two children to use at any time.	L				
Screen printing equipment	Cuts from staples on screen	Check screen thoroughly before use and replace any broken or loose staples.	L				
Dyes	Drinking	Make sure pots are clearly labelled and out of reach when not in use.	M				

Construction Tools and Equipment

What is the tool, equipment or material?	What are the hazards? Who might be harmed and how?	What are we already doing?	Risk rating * L,M or H	What further action is necessary?	By whom ?	By when?	Done
Measuring and Marking Out							
Try square	Sharp edges.	Draw attention to correct way to carry and use.	L				
Ruler	Incorrect use.	Draw attention to correct way to carry and use.	L				
Holding Devices							
Bench hook	Catch fingers	Demonstrate correct use.	L				
Work top	Catch fingers	Teacher sets up for use.	L				
Vice	Catch fingers	Demonstrate correct use.	L				
G clamp	Catch fingers and drop on toes	Demonstrate correct use	L				
Mitre block	Pinches from clamps	Check securely clamped.	L				
Pliers							
Side cutters	Fingers cut.	Adult supervision.	L				
Long nose pliers	Fingers cut.	Adult supervision.	L				
Combination pliers	Fingers cut.	Adult supervision.	L				
Knives							
Retractable blade knife	Lethal.	Adult use only.	L				
Safety rule	Lethal.	Adult use only.	L				

What is the tool, equipment or material?	What are the hazards? Who might be harmed and how?	What are we already doing?	Risk rating* L,M or H	What further action is necessary?	By whom?	By when?	Done
Rotary cutter	Fingers caught.	Show correct use and materials to be used on.	L				
Perforation cutter	Fingers caught.	Show correct use and materials to be used on.	L				
Tools for Making Holes							
Single hole punch	Fingers caught.	Adult to model correct use.	L				
Revolving hole punch	Fingers caught.	Adult supervision.	L				
Card drill	Fingers caught.	Show how to use.	L				
Hand drill	Slip/Sharp.	Show correct use.	L				
Twist drills	Slip/Sharp.	Show correct use.	L				
Gimlet	Slip, sharp point.	Teach how to hold correctly and adult supervision.	L				
Bradawl	Slip, sharp point.	Adult use only.	L				
Saws							
Junior hacksaw	Cuts	Supervise use.	L				
Snips							
Utility snips	Cut fingers	Show correct use/supervise.	L				
Safety snips	Cut fingers	Adult supervision.	L				
Scissors	Cut fingers	Adult to model how to hold scissors and make incisions	L				

Shaping and Finishing Equipment							
Files	Scraping skin	Show correct use.	L				
Cork block	Scraping skin	Show correct use.	L				
Glasspaper	Scraping skin	Show correct use.					

What is the tool, equipment or material?	What are the hazards? Who might be harmed and how?	What are we already doing?	Risk rating* L,M or H	What further action is necessary?	By whom?	By when?	Done
Materials to Make Frameworks							
Art straws	Storage		L				
Square section pine	Storage. Holding and carrying. Poked by material.	Correct storage. Adult modelling of how to hold and carry with thumbs on top and rod pointing down.	L				
Square section ramin	Storage. Holding and carrying. Poked by incorrect handling of material.	Correct storage. Adult modelling of how to hold and carry with thumbs on top and rod pointing down.	L				
Square section jelutong	Storage Holding and carrying. Poked by incorrect handling of material.	Correct storage. Adult modelling of how to hold and carry with thumbs on top and rod pointing down.	L				
Lollipop sticks	Poked by incorrect handling of material.	Adult modelling of how to hold and carry with thumbs on top and rod pointing down.	L				
Sheet Materials							
Correx	Poked by incorrect handling of material.	Adult modelling of how to carry correx.	L				
Mouldable Materials							

What is the tool, equipment or material?	What are the hazards? Who might be harmed and how?	What are we already doing?	Risk rating* L,M or H	What further action is necessary?	By who m?	By when?	Done
Structures and Mechanisms Wheels and axles							
Plastic rod	Poking, accidental damage to eyes	Care to be taken when carrying or holding.	L				
Steel rod	Poking,accidental damage to eyes	Care to be taken when carrying or holding.	L				
Dowel	Poking,accidental damage to eyes	Care to be taken when carrying or holding.	L				
Balloons	Swallowing when inflating.	Children not allowed to inflate balloons by mouth.	L				
Electrical equipment and components							
Batteries	Putting in mouths	Correct storage. Rechargeable batteries not to be used by children.	L				

Joining and Fastening Tools and Components							
What is the tool, equipment or material?	**What are the hazards? Who might be harmed and how?**	**What are we already doing?**	**Risk rating* L,M or H**	**What further action is necessary?**	**By whom?**	**By when?**	**Done**
Joining and Fastening Tools and Components							
Fastening tools and fasteners							
Paper fasteners	Pricked fingers	Teach correct handling.	L				
Click rivets	Skin caught	Teach correct use	L				
Panel pins	Perforation to skin	Teach correct use with pin pusher.	L				
Pin pusher	Perforation to skin	Push down with use of cutting mat.	L				
Screwdriver	Slipping and perforating skin.	Adult supervision	L				
Velcro	Grazing skin	Teach correct handling and cutting.	L				
Masking tape	Grazing skin	Teach correct handling and cutting.	L				
Double sided tape	Grazing skin	Teach correct handling and cutting.	L				
Glue guns and glue sticks							
High temperature glue gun	Burns	Adult Use Only					
Low temperature glue gun	Burns	Use with close adult supervision on a 1:1 basis.					
What is the tool, equipment or material?	**What are the hazards? Who might be harmed and how?**	**What are we already doing?**	**Risk rating* L,M or H**	**What further action is necessary?**	**By whom?**	**By when?**	**Done**
Glues							
Copydex	Swallowing Sticking to hair/skin	Adults to model and supervise correct use.	L				
Glue sticks	Poking	Adults to model and supervise correct use.	L				
PVA glue	Swallowing Sticking to hair/skin	Adults to model and supervise correct use.	L				