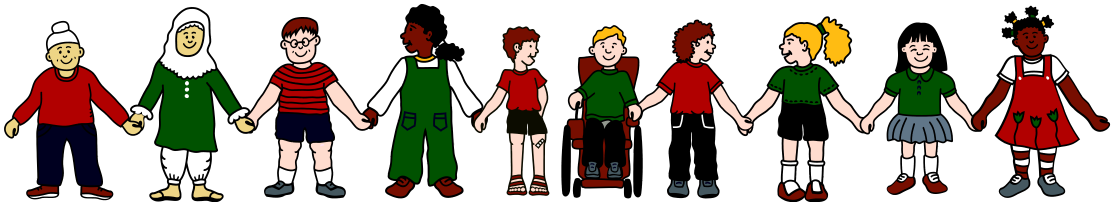
THE GILES NURSERY AND INFANTS' SCHOOL



Design and technology Report for Governors

2021/2022

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Design and technology Curriculum Leader: Alexandra Busby
Governor: Judith Garley

Statement of intent

The aim of our design and technology curriculum is to ensure that:

- pupils develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- pupils 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
- pupils critique, evaluate and test their ideas and products and the work of others
- pupils understand and apply the principles of nutrition and learn to cook

The role of the curriculum leader is to continually monitor and assess the quality of teaching and the curriculum being taught across the school to ensure a creative and spiralled curriculum that is accessible to all pupils and supports those pupils that are disadvantaged or have Special Educational Needs and Disabilities (SEND). This is ensured through our school monitoring cycle, which includes lesson observations, work scrutiny, display monitoring and photographic evidence. Photographic evidence is displayed in the design and technology photographic evidence file. All other evidence is kept in the design and technology curriculum file, which is monitored by the head teacher each academic year. Pupils are also involved in the monitoring of design and technology through the collection of pupil voice from each year group. Further monitoring takes place through curriculum leader reports, which are shared with governors.

Curriculum intent

Teachers plan a creative, holistic, spiral curriculum to ensure that design and technology learning happens in a sequential and progressive manner. This enables pupils to build their knowledge and skills upon previous learning and embed what they have already learnt. This year the curriculum objectives have been delivered through the following topics and areas of learning.

Year 2

The topics this year have included:

Autumn term
Healthy Me / An Island Home
Context: Health and exercise

Food technology

- sort a range of food into the five food groups
- design a healthy salad
- prepare a salad using simple techniques

Spring term
A Land Far, Far Away (Antarctica and Native Americans)

Context: Hot and cold deserts, castles and buggies

- look at images of different castles and a model of the Snow Queen's castle
- discuss different features and their purpose
- investigate techniques to create different features and different ways to join materials
- use their knowledge of castles to design their own castle for the Snow Queen, setting the design criteria and recording their ideas
- make a mock-up of their castle design and strengthening it so that it stands
- to finish the castle with decorative features
- explore and investigate a range of model vehicles
- discuss the different features of the vehicles
- identify the different parts of vehicles
- investigate wheels and axles and understand that they can be assembled in two different ways
- using their knowledge of Scott and the Antarctica, design their own buggy, setting the design criteria and recording their ideas
- make a mock-up of their buggy design
- evaluate their vehicle and how it compares to their original ideas

Food technology

- pupils to design and make oat cookies
- pupils to develop safety knowledge when preparing and making food

Wider curriculum – links to Religious Education (RE)

- Easter cards
- Mother's Day cards

Summer term
Nature Detectives (Habitats and Life Cycles)

Context: Butterflies

- investigate how stuffed toys are assembled
- use their knowledge of stuffed toys to design their own 3D butterfly toy, setting the design criteria and recording ideas
- create a paper pattern template of their butterfly and use it to cut two identical pieces
- join fabric together using simple stitching and stuff butterfly in order to give 3D effect and add decoration

- evaluate their finished product, recording how it compares to original ideas
- investigate features of houses in 1666
- construct models or draw plans of our own houses using own knowledge, setting the design criteria
- list and discuss appropriate materials to build designs
- make a mock-up of their house design and strengthen it so it stands
- finish the house with decorative features

Food technology

- Design a healthy pizza
- Prepare a simple pizza using a range of ingredients and equipment
- Evaluate the pizza against original design and suggest improvements

Wider curriculum – links to Religious Education (R.E.)

- Father's Day cards

Year 1
Autumn term
Ourselves and Our Senses / The Natural World / Toys

- designing and making replicas of old toys – cross-curricular links with history
- examining fruit
- design and make their own fruit kebab
- design and make a cup and ball toy – cross curricular links with history
- make a Christmas card with a moving part – cross curricular links with RE

Spring term
Winter / Traditional Tales / Our Local Area

- to generate, develop and communicate ideas through talking, drawing and templates
- to select from and range of tools and equipment to perform practical tasks, for example, cutting and joining
- to select from and use a wide range of materials according to their characteristics
- to explore and evaluate their ideas and products against design criteria
- to build structures exploring how they can be made, stiffer and more stable
- to recognise the simple features of a puppet theatre
- to investigate how materials and components have been used and have a basic idea of how the items have been assembled
- to use a limited range of materials and techniques to assemble and join components to make realistic models of a puppet theatre
- to design and make a clock tower

Summer term
At the Seaside / 'The Gruffalo'

- design and make Gruffalo biscuits
- design and make a pirate ship as a moving picture
- to follow simple instructions to make a model
- to learn to use tools correctly and safely; for example, scissors, hole punch
- suggest ideas and explain what they are going to do
- to make their own design using appropriate techniques and materials
- the children look at beach huts as part of this investigation, and look into their uses and design
- to evaluate their product

Reception
Autumn term
Imaginative storytelling linked to the Three Little Pigs/ Wolves and environments
Expressive arts and design

- building houses using a variety of recycled construction resources
- making a biscuit house
- puppets
- role play areas – architects office, building site
- Diva lamps – cross-curricular with RE

Spring term
Food technology and science investigations linked to The Gingerbread Man/ Safe Journeys
Expressive arts and design

- gingerbread man collage/investigation into materials – cross curricular links with understanding the world
- junk box modelling
- making a clay gingerbread man
- cooking gingerbread men
- building a bridge using recycled materials
- constructing a boat that floats
- creating a journey for the Gingerbread Man using magnets
- role play – making baker's hats, masks
- Chinese New Year lanterns and dragons – cross-curricular links with R.E.

Summer term
Life cycles linked to The Little Red Hen/ Growing
Expressive arts and design / People, Cultures and Community

- 3D windmills
- making and evaluating bread
- junk modelling

- creating a collage hen
- making sandwiches and a graph of the fillings – cross curricular links with maths

All Reception classes have a range of construction materials available to the children at all times, providing opportunities for children to independently design, make and evaluate their own models.

Nursery
Autumn term
Nursery Rhymes / Celebrations
Expressive arts and design

- 2D and 3D stars
- paper plate ladybirds
- weaving and sewing with wool
- sparkly webs
- creating a 3D spider
- creating a woven fruit basket
- creating a firework picture using different media
- decorating party biscuits
- making party sandwiches
- making Christmas tree decorations
- making Christmas cards

Spring
Jungle Animals / Growing
Expressive arts and design

- Mother's Day cards
- Chinese dragons
- making Easter biscuits
- tissue flowers
- sewing around jungle animals

Summer term
Sand and Water
Expressive arts and design

- collage frogs and tadpoles
- making musical instruments
- rainbow fish collage
- making pirate hats
- making telescopes and binoculars

- making pirate bunting
- making dancing octopuses
- making 3D crabs

Implementation

Overview of this year so far: progress towards the implementation of the design and technology curriculum 2021/22

This year has been an exciting year for design and technology at The Giles Nursery and Infants' School. Pupils have continued to enjoy the exciting learning taking place in design and technology lessons. They have continued to develop their own knowledge and skills, which has been rewarding for teachers to see.

Following the successful use of Purple Mash during school closures, it has continued to be used in key stage 1 to set homework, including design and technology learning that links to the learning that is taking place in the classroom. Purple Mash is also used to provide home learning for pupils that are isolating but well enough to continue with their schooling. The learning set has coincided with the learning taking place in school, including design and technology if it is being taught that week.

Prior to and after national school closures, the kitchen has been in use for the breakfast and after-school clubs, which has allowed the pupils attending the clubs to have additional opportunities to take part in food technology activities.

The design and technology curriculum is cross-curricular and is taught in a varied and rich way throughout the school. The learning is brought to life by the teachers and made meaningful for the pupils in a variety of contexts. This ability to hook the pupils has shown to be effective in engaging all pupils, but especially those pupils that are disadvantaged or have SEND.

During the school year at Twilight sessions, Curriculum Maps and Curriculum Journeys were updated to reflect any changes to the curriculum. Key vocabulary was also updated from nursery through to year 2 to ensure that it is age-related and progressive as the pupils move through the school. Vocabulary from the previous year was updated on the Curriculum Journeys to ensure that each year group can recap and continue to model the previously taught vocabulary. Year groups will continue to discuss the key vocabulary with all staff in the classrooms before starting a new topic so that all staff can model the correct subject vocabulary. Key vocabulary from the previous year group has also been added to planning across the school so that staff can see which vocabulary to recap and which to model when teaching. This ensures that our enriching spiral curriculum can be maintained, along with the strong thread of continuity that runs throughout the school.

Due to COVID-19, the curriculum leader has been unable to represent the school at curriculum leadership meetings with design and technology leaders from other schools in the Hertfordshire area. This is an important part of professional development and a key time to share teaching ideas and discuss developments in the curriculum area. There is now a

scheduled date for a meeting with the design and technology curriculum leader in the Junior school to meet and discuss the progression from the Infant school through to the end of Junior school, which will provide a good understanding of where the pupils are coming from into Junior school and where they are going once they progress from Infant school.

Over the course of the autumn term the Early Years curriculum was updated to ensure that it is in line with the new statutory national curriculum. This has included changes to Expressive Arts and Design which is what design and technology is taught as a part of. The curriculum journey was updated to reflect the new topics being taught in the Early Years.

A design and technology deep dive is planned to take place in mid-March 2022. Observations will take place across different classes and use key vocabulary will be monitored. Examples of work and pupil voice will be collected during the deep dive.

The design and technology policy was reviewed in November 2019 and updated accordingly. It will be reviewed again in October 2022.

In order to implement our curriculum successfully, progress towards targets 2020/21 was as follows:

Whole school moderation: Throughout the year, it has been planned for all subjects to undergo a whole school moderation, which is a fantastic opportunity to share evidence of the design and technology that has taken place across the school so far this year.

Observe design and technology across the school: All year groups are planned to be observed in the spring term as part of a design and technology deep dive. The observations will provide rich evidence of the different design and technology lessons that are being taught within the school and will also demonstrate the progression of skills from early years through to the end of key stage 1.

Review activities through pupil voice: The curriculum leader has planned to gather pupil voice in the summer term. This will provide feedback on how much the pupils are enjoying design and technology lessons throughout the school and indicate areas of development.

Collect photographic evidence: Photographic evidence for design and technology is in the process of being updated with photographs from earlier in the 2021/22 school year. It was updated last year with photos from the 2019/20 and 2020/21 school years, including photographic evidence of remote learning also, as this was a large part of the learning experience provided by the school.

Monitor resources: Due to the school closure during the spring term last year, many of the new resources purchased last year were not used, meaning that no new updates are required as they have only been used once. However, this is something that will be reviewed at the design and technology moderation so that any required resources can be purchased to support the teaching of design and technology.

Due to the school closure during the spring term of the 2020/21 school year, a 'recovery curriculum' was put into place for the current school year to address gaps in pupils learning that have been caused by COVID-19. Teachers met with previous year groups to discuss which topics and vocabulary had been missed in all subjects including design and technology. Teachers then, with the support of the curriculum journeys, began to adapt the curriculum and teaching in order to address gaps in learning while still ensuring a progressive, spiral curriculum. The curriculum leaders were on hand to support with this as necessary.

Key vocabulary from previous year groups was added to planning to ensure that pupils were familiar with the vocabulary from the previous year before progressing onto the current year's vocabulary. All key vocabulary was also discussed with year group teams, including teaching assistants and additional learning support staff, to ensure consistent use and modeling to support the pupils in their learning and progression.

The changes to the early years curriculum was looked into and the appropriate changes have been made to the current curriculum being taught at Giles Nursery and Infants' School to ensure full coverage of the statutory requirements. The curriculum journey has been updated accordingly. Design and technology falls under one sub-section of the 'Expressive Arts and Design' subject area called 'Creating with Materials'. There have been minor changes to this area that include being able to explain their processes when creating.

Impact

It is through regular observations, throughout each year group, that the quality of education in design and technology teaching is monitored. Pupils are consistently building on previously learnt skills and knowledge, which have evidently been embedded. This is evident from observations, the quality of work in books and folders, examples of practical work and through interviews conducted with the pupils.

Monitoring is tracked through a whole-school template, which includes the scheduling of regular observations, work scrutiny and moderation. This year there has also been the addition of a deep dive as part of monitoring. The design and technology deep dive is due to take place in March 2022. This enables the curriculum leader to ensure there is consistency in the delivery of the curriculum and in the judgements being made. It also provides an ideal opportunity to collect photographic evidence. Photographic evidence is collated and added to the design and technology photographic evidence file. Photographs are also collected from subject folders on the school server. The curriculum leader collects pupil voice regularly. Pupils speak with enthusiasm about their learning and enjoy the range of practical experiences on offer.

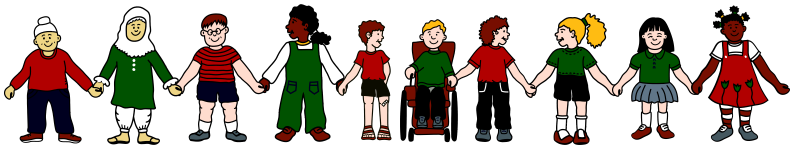
The governor with responsibility for design and technology is kept updated on the design and technology curriculum. The curriculum leader shares a subject report with the governor, detailing the work that has been undertaken to ensure that the quality of education provided to pupils in the subject of design technology remains of the highest quality. Governors also take part in learning walks throughout the year.

Parents are informed of the design and technology curriculum through the curriculum map and journey that are published on the school website. The updated curriculum map and journey were added in spring 2022. The action planning for design and technology can also be found on the school website. Parents are also kept updated through the school's weekly newsletter, which includes contributions from each year group, detailing the learning from that week.

In key stage 1, design and technology assessment data is uploaded to SIMS twice a year, in the spring and summer terms respectively, so the key stage 1 assessment data can be tracked. Design and technology as a subject is not part of the Early Years Foundation Stage curriculum, but is taught under 'Creating with Materials, one of the two sub-sections of the expressive arts and design area of learning. The assessment data for early years is tracked through SIMS and is updated once every term.

Moving forward: Actions for 2022/23

- carry out planned whole school moderation in design and technology
- carry out planned observations in design and technology across the school
- carry out planned review activities in design and technology through pupil voice
- continue to collate photographic evidence of displays and pupil's work
- continue to monitor resources for needed updates
- implement new assessment procedures when guidance comes into effect
- regularly review risk assessment for kitchen



THE
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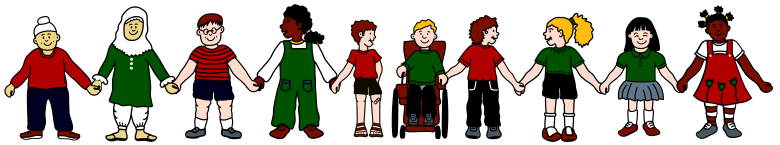

Curriculum Journey

Design and technology

Nursery

Subject: Design Technology
Autumn Term
Topic: Nursery Rhymes / Celebrations

Key vocabulary: build, glue, stick, scissors, make, cut

Activity	Skills	Knowledge
Paintings and playdough models of ladybirds.	Develop their own ideas and then decide which materials to use to express them Explore colour and colour mixing	Knowledge of colours To use simple tools
Paintings and models of spiders	Develop their own ideas and then decide which materials to use to express them	Knowing that a line means an enclosed space.
To create a 3D spider.	Make simple models which express their ideas	To use simple tools
To use a variety of different media to create a sparkly web	To work within an enclosed space to create a pattern. Apply glue and different textures	Knowing what colours to use and how to use different tools to create different effects Knowledge of what glue is used for.
To cut and stick firework pictures with different media	Experiment with blocks, colours and marks.	Knowing that a line means an enclosed space. Knowledge of colours To use simple tools Knowledge of what glue is used for.
Cutting fruit shapes and strips of card to create a woven fruit basket.	Develop their own ideas and then decide which materials to use to express them	Knowing that a line means an enclosed space. To use some simple tools
Decorating party biscuits. Making party sandwiches.	Choosing colours and making patterns	Knowledge of simple tools to create shapes and patterns
Christmas tree decorations	Printing shapes in the correct place.	Knowing that a line means an enclosed space.

Making Christmas cards	Application of glue and sticking glitter and cotton wool. Adding the details of the characters features.	Knowledge of colours. Knowledge of what glue is used for.

Nursery

Subject: Design Technology
Spring Term
Topic: Jungle Animals / Growing

Key vocabulary: build, glue, stick, scissors, make, cut
Topic: safe

Activity	Skills	Knowledge
Mother's Day cards.	Discussing the role of a mother or another significant female person in the child's life. Discussing what makes them special.	Understanding why we celebrate Mother's Day. Special person in their lives
Tissue flowers.	Creating patterns. Using simple tools to effect changes to materials	Knowing what a poppy look like Knowledge of colours
Sewing around jungle animals	Creating patterns. Using simple tools to effect changes to materials.	Knowledge of patterns Knowing how to use simple tools
Chinese dragons	Manipulation of materials to make dragons, lucky envelopes, blossom cards, using chopsticks to pick up pom-poms, wool, crepe paper. Cutting and sticking. Working within an enclosed space to make a pattern or picture.	Knowing that a line means an enclosed space. Knowledge of colours. Knowledge of pattern. Knowing how to use simple tools

Nursery

Subject: Design Technology
Summer Term
Topic: Sand and water

Key vocabulary: build, glue, stick, scissors, make, cut

Activity	Skills	Knowledge
Painting and collage frogs and tadpoles	Create closed shapes with continuous lines and use these shapes to represent objects To explore different materials, apply glue and use correct colours.	Knowing that a line means an enclosed space. Knowledge of colours.
Creating and making musical instruments.	To develop their ideas and select different materials to make their own instrument To play instruments with increasing control	Knowing some different instruments and how they create sound
Rainbow fish collage	To work within an enclosed space to create a pattern. Apply glue and different textures	Knowledge of patterns Knowledge of colours
Pirates hats	To join different materials together and explore different textures	Knowing how to use most simple tools to join different materials together
Telescope's and Binoculars	To join different materials together and explore different textures	Knowing how to use most simple tools to join different materials together
Pirate bunting	To join different materials together and explore different textures	Knowing how to use most simple tools to join different materials together
Dancing octopuses	To join different materials together To count out and join eight tentacles to create an octopus	Knowing what an octopus looks like

3D Crabs	Explore different materials freely develop their ideas how to use them and what to make	Knowing what a crab looks like

Reception

Subject: Design and technology
Topic: Autumn 1 – Imaginative story telling linked to the Three Little Pigs
Autumn 2 – Wolves and environments
Term: Autumn

Previous vocabulary: build, glue, stick, scissors, make, cut
Key vocabulary: construct/construction/constructing, join, tape
Topic vocabulary: house, little pigs, cement, icing

Activity	Skills	Knowledge
Constructing a house using recycled materials.	To be able to construct a model. To be able to use different resources to join materials together.	Knowledge of the different parts of houses. Knowledge of houses around the world.
Making a biscuit house.	Manipulating and applying the icing cement to join the biscuits together to create a stable structure. Perseverance to keep trying if it does not work the first time.	Knowing how to construct a house using their knowledge of what a house looks like. Knowing the features of a house.

Reception

Subject: Design and technology
Topic: Spring 1 – Food technology and science investigations linked to The Gingerbread Man
Spring 2 – Safe Journeys
Term: Spring

Previous vocabulary: build, glue, stick, scissors, make, cut
Key vocabulary: shape, pattern
Food technology vocabulary: safe, instructions, cook, ingredients
Topic vocabulary: ginger, gingerbread, bake, oven

Activity	Skills	Knowledge
Making a clay Gingerbread Man.	Manipulating materials to achieve a planned effect. Using simple tools to effect changes to materials.	Knowing what a Gingerbread Man and what one looks like. Knowledge of pattern.
Celebrating Chinese New Year.	Beliefs and Practices. Sources of Wisdom. Retelling the story in their own words using wooden figures. Manipulation of materials to make dragons, lucky envelopes, blossom cards, using chopsticks to pick up pom-poms, wool, crepe	Knowing why Chinese communities around the world celebrate Chinese New Year. Knowing the ways that Chinese New Year celebrated by their peers, local community and around the world. Knowing the story of Chinese New Year and the characters.

	paper. Cutting and sticking. Working within an enclosed space to make a pattern or picture.	
To bake a gingerbread man using instructions/recipe.	To use cooking equipment safely Following instructions To use simple tools to achieve a planned effect Following safety instructions Using tools safely	Knowledge of how to make a gingerbread man Knowledge of ingredients Knowledge of safe practise when cooking
Building a bridge using recycled materials.	To be able to construct a standing bridge. To be able to use different resources to join materials together.	Knowledge of how a bridge looks. Knowledge of how to create a standing bridge that can be safely crossed.
Constructing a boat that will float.	To be able to construct a floating boat. To be able to use different resources to join materials together.	Knowledge of how a boat looks. Knowledge of how to create a boat that successfully floats.
Creating a journey for the Gingerbread Man using magnets	To be able to use simple map skills to create a journey. To be able to move a magnet.	Knowledge of maps. Knowledge of magnets and how they work.

Reception

Subject: Design and technology
Topic: Summer 1 – Life cycles linked to The Little Red Hen
Summer 2 – Growing
Term: Summer

Revisit previous vocabulary: build, glue, stick, scissors, make, cut
Key vocabulary: bake, mix, safe, spread, knife, ingredients, instructions
Topic vocabulary: sandwich, filling, bread, bread machine, dough, knead

Activity	Skills	Knowledge
Making 2D and 3D shape windmills	Constructing the different parts of the windmill. Joining the pieces of the windmill together.	Knowledge of what windmills look like. Knowledge of 2D and 3D shapes and what they can be used for.
Making bread rolls and bread in a bread machine.	Following instructions. Mixing and manipulate the dough.	Knowledge of how to make bread. Knowledge of what ingredients you need to make bread. Knowledge of how to keep safe when cooking and using cooking equipment.
Making sandwiches and a graph of the fillings.	Choosing the filling. Spreading the butter and the filling. Putting the sandwich together. Cutting the sandwich in half.	Knowledge of how to make a healthy sandwich. Knowing what graphs are. Knowing how to create a graph.

	Being able to place their vote on the graph correctly.	

Year 1

Subject: Design and technology
Topic: Ourselves and our Senses / The Natural World / Toys
Term: Autumn

Previous vocabulary: build, glue, stick, scissors, make, cut, construct/construction/constructing, join, tape, bake, mix, safe, spread, knife, ingredients, instructions, shape, pattern, cook
Key vocabulary: evaluate, record, model, design, equipment
Food technology key vocabulary: skewer, kebab, bowl, chopping board, fruit, vegetables, healthy, design, equipment, chop

Activity	Skills	Knowledge
Examining fruit The children will examine a range of fruit and vegetables. Do they know what it is called and where it is grown? Use world maps and atlas. The children will handle and smell the fruit and vegetables. They will describe orally what they look, feel and smell like. Cut open a few fruit and vegetables and let the children look at the differences. Investigate methods of grouping fruit and	-use the basic principles of a healthy and varied diet to prepare dishes	-understand where food comes from

vegetables.		
Design and make a fruit kebab- -Discuss with the children basic food hygiene practises (design poster) - Design a fruit kebab from selection of fruits -Choose equipment needed to make it -Follow instructions to make fruit kebab -Evaluate fruit kebab	**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 wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities **Evaluate** -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	

Design a cup and ball - Design a pattern - Record what equipment will be needed -Make cup and ball	**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 wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities **Evaluate** -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	
Make a Christmas card with a moving part.	**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 wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities **Evaluate** -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	

Year 1

Subject: Design and technology
Topic: Winter / Traditional Tales / Our Local Area
Term: Spring

Previous vocabulary: build, glue, stick, scissors, make, cut, construct/construction/constructing, join, tape, bake, mix, safe, spread, knife, ingredients, instructions, shape, pattern, cook
Key vocabulary: design, structure, stronger, stiffer, stable, equipment, evaluate
Topic related vocabulary: puppet, theatre, Clock Tower

Activity	Skills	Knowledge
Design and make a Puppet Theatre The children will design and create a Goldilocks puppet theatre using cardboard boxes, card, art straws and wool. Children will read a non-fiction book about puppet theatres and how to design, construct and use them.	**Design:** -generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. -design purposeful, functional, appealing products for themselves and other users based on design criteria **Make:** -select from and use a range of tools and equipment to	Technical Knowledge -build structures, exploring how they can be made stronger, stiffer and more stable

	perform practical tasks -select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics **<u>Evaluate</u>** -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	
Design and make a Clock Tower The children will design and make a clock tower based on Stevenage Clock Tower. Learn about the history and look at different examples of clock towers.	**<u>Design:</u>** -generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. -design purposeful, functional, appealing products for themselves and other users based on design criteria **<u>Make:</u>** -select from and use a range of tools and equipment to perform practical tasks -select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics **<u>Evaluate</u>** -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	<u>Technical Knowledge</u> -build structures, exploring how they can be made stronger, stiffer and more stable

Year 1

Subject: Design and technology
Topic: At the Seaside / The Gruffalo
Term: Summer

Previous vocabulary: build, glue, stick, scissors, make, cut, construct/construction/constructing, join, tape, bake, mix, safe, spread, knife, ingredients, instructions, shape, pattern, cook

Key vocabulary: design, method, evaluate, healthy, equipment, diet, materials, sliders, slits, split-pins, moving parts, leavers, flaps

Food technology vocabulary: bake, ingredients

Activity	Skills	Knowledge
Design and make Gruffalo biscuits The children will design and create a healthier Gruffalo biscuit using oats. They will list the ingredients and write a method for baking the biscuits. The children will then follow their instructions to make the biscuits and then evaluate the result.	**Design:** -generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. -design purposeful, functional, appealing products for themselves and other users based on design criteria **Make:** -select from and use a wide range of materials and components, including construction materials, textiles	Know what a healthier ingredient is. Know how to mix ingredients and use equipment.

	and ingredients, according to their characteristics -use the basic principles of a healthy and varied diet to prepare dishes **Evaluate** -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	
Design and make a Pirate Ship Moving Picture Look at moving pictures and as a class share ideas for what part of the picture could move. Introduce the vocabulary, sliders, slits, moving parts, split pins, leavers, flaps. Children will design their moving picture on paper, outlining how the moving parts will work through discussion. Children to practice and experiment altering their moving parts i.e. can they make their slider stiffer, pirate ship more stable, practice using split pins, cutting slits etc.	**Design:** -generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. -design purposeful, functional, appealing products for themselves and other users based on design criteria **Make:** -select from and use a range of tools and equipment to perform practical tasks -select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics **Evaluate** -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	Technical Knowledge -explore and use mechanisms, in their products

Year 2

Subject: Design and technology
Topic: Healthy Me / An Island Home
Term: Autumn

Previous vocabulary: build, glue, stick, scissors, make, cut, construct/construction/constructing, join, tape, bake, mix, safe, spread, knife, ingredients, instructions, shape, pattern, cook, evaluate, record, model, design, equipment, skewer, kebab, bowl, chopping board, fruit, vegetables, healthy, design, equipment, chop, method, diet, sliders, slits, split-pins, moving parts, leavers, flaps, structure, stronger, stiffer, stable, evaluate

Food technology vocabulary: hygiene, slice, peel, peeler

Activity	Skills	Knowledge
• Sort a range of food into the five food groups and discuss the places of origin. • Discuss and design a healthy balanced plate of food.	• Sorting by criteria	• Know the five food groups • Know what makes a healthy and balanced plate of food.
• Design a healthy salad to accompany a main dish.	• Design purposeful, functional, appealing products based on design criteria • Communicate ideas	• Identifying ingredients to use that are appropriate to the dish.

• Prepare a simple salad using a range of techniques.	• Use appropriate tools to prepare salad, e.g. to peel, cut, grate and dice.	• Understand how to use equipment safely. • Understand the importance of hygiene during preparation of food.

Year 2

Subject: Design and technology
Topic: A Land Far, Far Away (Antarctica and Native Americans)
Term: Spring

Previous vocabulary: build, glue, stick, scissors, make, cut, construct/construction/constructing, join, tape, bake, mix, safe, spread, knife, ingredients, instructions, shape, pattern, cook, evaluate, record, model, design, equipment, skewer, kebab, bowl, chopping board, fruit, vegetables, healthy, design, equipment, chop, method, diet, sliders, slits, split-pins, moving parts, leavers, flaps, structure, stronger, stiffer, stable, evaluate
Key vocabulary: features, strengthen, hacksaw, vice, wheel, axel, chassis, decorate, mock-up
Food technology vocabulary: scales, baking tray, recipe
Topic vocabulary: arches, turrets, towers, body, cab, plough, logo

Activity	Skills	Knowledge
• Look at images of different castles and a model of the Snow Queen's castle. • Discuss different features and their purpose, e.g. arrow slits, battlements, portcullis etc. Look to see if there are any reoccurring structural shapes, e.g., arches, turrets, towers and discuss	• Investigative, disassemble and evaluate	• Knowledge of features of castles and the different purposes of the features. • Knowledge and vocabulary associated with structure / architecture of a castle

• Investigate techniques to create different features, including arrow slits, battlements, hinged doors, bridges etc. Investigate ways to join materials.	• Select from and use a range of tools and equipment to perform practical tasks • Select from and use a wide range of materials and components, according to their characteristics. • Explore and use mechanisms in their products	• A range of techniques to create an effect / outcome
• Using their knowledge of castles design their own castle for the Snow Queen. Set the design criteria and record ideas.	• Design purposeful, functional, appealing products based on design criteria • Communicate ideas	• Apply prior knowledge to design.
• Make a mock-up of their castle design and strengthen so it stands up.	• Communicate ideas • Select from and use a range of tools and equipment to perform practical tasks • Select from and use a wide range of materials and components, according to their characteristics. • Build structures, exploring how they can be made stronger, stiffer and more stable	• Apply prior knowledge to make product. • Use equipment / tools safely
• Finish the castle with decorative features	• Communicate ideas • Design purposeful, functional, appealing products based on design criteria	• Learning to evaluate own work against design criteria.
• Explore and investigate a range of model vehicles, *eg snow buggies, snow ploughs, sand buggies and tractors.* • Discuss the different features of the vehicles, *eg Why do vehicles have wheels? Do they all have the same number and size of wheels? Why are vehicles different shapes? Which vehicles have parts that move, light up or make a noise?* • Identify the different parts of vehicles - wheel, axle, chassis, body, cab, plough.	• Investigative, disassemble and evaluate	• Knowledge of how different vehicles are used for different purposes and what features they may contain. • Name the main parts of a vehicle.

• Investigate wheels and axles and understand that they can be assembled in two different ways:
  ○ either the wheel is attached tightly to the axle and the axle is free to rotate, or
  ○ the axle is fixed with the wheel free to rotate around it
	• Select from and use a range of tools and equipment to perform practical tasks
	• Select from and use a wide range of materials and components, according to their characteristics.
	• Explore and use mechanisms in their products
		• Join wheels and axles effectively and explain how they work.

• Using their knowledge of Scott and the Antarctic design their own snow mobile. Set the design criteria and record ideas.	• Design purposeful, functional, appealing products based on design criteria • Communicate ideas	• Apply prior knowledge to design.
• Make a mock-up of their snow mobile design.	• Communicate ideas • Select from and use a range of tools and equipment to perform practical tasks • Select from and use a wide range of materials and components, according to their characteristics. • Explore and use mechanisms in their products	• Apply prior knowledge to make product. • Use equipment / tools safely
• Finish the vehicle with a label or logo • evaluate their finished vehicle, recording how it works and matches the original ideas	• Communicate ideas • Design purposeful, functional, appealing products based on design criteria • Evaluate their ideas and products against design criteria	• Learning to evaluate own work against design criteria.
• Finish the castle with decorative features • evaluate their finished product, recording how it works and matches the original ideas	• Communicate ideas • Design purposeful, functional, appealing products based on design criteria • Evaluate their ideas and products against design criteria	• Learning to evaluate own work against design criteria.
• Follow a recipe to make oat biscuits (linked to Scott's expedition to the South Pole)	• Use appropriate equipment e.g. scales, baking tray. • Select appropriate ingredients.	• Understand how to use equipment safely. • Understand the importance of hygiene during preparation of food. • Discuss the safety of using ovens and heat.

Year 2

Subject: Design and technology
Topic: Nature Detectives (Habitats and Life Cycles)
Term: Summer

Previous vocabulary: build, glue, stick, scissors, make, cut, construct/construction/constructing, join, tape, bake, mix, safe, spread, knife, ingredients, instructions, shape, pattern, cook, evaluate, record, model, design, equipment, skewer, kebab, bowl, chopping board, fruit, vegetables, healthy, design, equipment, chop, method, diet, sliders, slits, split-pins, moving parts, leavers, flaps, structure, stronger, stiffer, stable, evaluate
Key vocabulary: assemble / disassemble, identical, needle, thread, fabric, stitch, decoration, stuffing, seam
Food technology vocabulary: oven, heat, cut, grate, dice, tools, hygiene

Activity	Skills	Knowledge
Investigate how stuffed toys are assembled – cut out fabric, stitched together	Investigative, disassemble and evaluate Explore and evaluate a range of existing products	Knowledge of how toys are assembled, including stitches, decoration, hems, stuffing, joining etc. Develop associated vocabulary – see above.
Using their knowledge of stuffed toys to design their own 3D butterfly toy. Set the design criteria	Design purposeful, functional, appealing products based on design criteria	Apply prior knowledge to design.

and record ideas.	Communicate ideas	
Create a paper pattern template of their butterfly and use this to cut two identical pieces.	Communicate ideas Select from and use a range of tools and equipment to perform practical tasks Select from and use a wide range of materials and components, according to their characteristics.	Apply prior knowledge to make product. Use equipment / tools safely
Join fabric together using simple stitching and stuff butterfly with an appropriate material in order to give 3D effect. Add decoration including sequins, buttons etc.	Communicate ideas Design purposeful, functional, appealing products based on design criteria Select from and use a range of tools and equipment to perform practical tasks Select from and use a wide range of materials and components, according to their characteristics.	Apply prior knowledge to make product. Use equipment / tools safely
Evaluate their finished product, recording how it works and matches the original ideas	Evaluate their ideas and products against design criteria	Learning to evaluate own work against design criteria. Being able to identify strengths and areas for development for next time.
Investigate the features of houses in 1666.	Explore and evaluate a range of existing products	Knowledge of features of houses in 1666 and the different purposes of the features. Knowledge and vocabulary associated with structure / architecture of a house in 1666
Construct models or draw plans of our own houses using their own knowledge. Set the design	Design purposeful, functional, appealing products for themselves	Apply prior knowledge to design.

criteria. List and discuss appropriate materials to build our designs	Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and ICT	
Make a mock-up of their house design and strengthen so it stands up.	Communicate ideas Select from and use a range of tools and equipment to perform practical tasks Select from and use a wide range of materials and components, according to their characteristics. Build structures, exploring how they can be made stronger, stiffer and more stable	Apply prior knowledge to make product. Use equipment / tools safely
Finish the castle with decorative features	Communicate ideas Design purposeful, functional, appealing products based on design criteria	Learning to evaluate own work against design criteria.
Design a healthy pizza.	Design purposeful, functional, appealing products based on design criteria Communicate ideas	Identifying ingredients to use that are appropriate to the dish.
Prepare a simple pizza using a range of ingredients and equipment.	Use appropriate tools to prepare pizza e.g. to peel, cut, grate and dice.	Understand how to use equipment safely. Understand the importance of hygiene during preparation of food. Discuss the safety of using ovens and heat.
Evaluate the pizza against original design and suggest improvements.	Evaluate their ideas and product against the design criteria.	Learning to evaluate own work against design criteria.

Subject: Design Technology – Food Technology
Year overview
Year 2

Activity	Skills	Knowledge
Autumn Term • Sort a range of food into the five food groups and discuss the places of origin. • Discuss and design a healthy balanced plate of food.	• Sorting by criteria	• Know the 5 food groups • Know what makes a healthy and balanced plate of food.
• Design a healthy salad to accompany a main dish.	• Design purposeful, functional, appealing products based on design criteria • Communicate ideas	• Identifying ingredients to use that are appropriate to the dish.
• Prepare a simple salad using a range of techniques.	• Use appropriate tools to prepare salad, e.g. to peel, cut, grate and dice.	• Understand how to use equipment safely. • Understand the importance of hygiene during preparation of food.

Spring Term • Follow a recipe to make oat biscuits. (linked to Scott's expedition to the South Pole)	• Use appropriate equipment e.g. scales, baking tray. • Select appropriate ingredients.	• Understand how to use equipment safely. • Understand the importance of hygiene during preparation of food. • Discuss the safety of using ovens and heat.
Summer Term • Design a healthy pizza.	• Design purposeful, functional, appealing products based on design criteria • Communicate ideas	• Identifying ingredients to use that are appropriate to the dish.
• Prepare a simple pizza using a range of ingredients and equipment.	• Use appropriate tools to prepare pizza e.g. to peel, cut, grate and dice.	• Understand how to use equipment safely. • Understand the importance of hygiene during preparation of food. • Discuss the safety of using ovens and heat.
• Evaluate the pizza against original design and suggest improvements.	• Evaluate their ideas and product against the design criteria.	• Learning to evaluate own work against design criteria.