

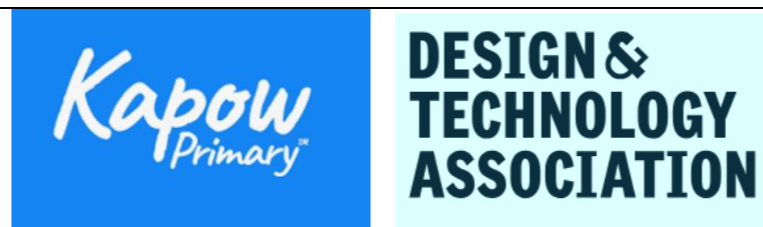


Subject Overview Skegness Infant and Junior Academies

Subject – Design and Technology



Our Curriculum Partners for Design and Technology



Knowing More and Remembering More

The 'projects on a page' include core knowledge and skill development for each year group. Key technical terminology is taught in context. Additional opportunities on interactive programmes, such as Bedrock and Kahoot, enable children to revisit key topic vocabulary.

Term 1

Term 2

Term 3

Term 4

Term 5

Term 6

Knowing me Knowing you

Tell me a tale

Where shall we go

Footprints

The great outdoors

What if...

Nursery

Personal, Social and Emotional Development

Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen or one which is suggested to them.

Physical Development

- Use large-muscle movements to wave flags and streamers, paint and make marks.
- Choose the right resources to carry out their own plan.
- Use one-handed tools and equipment, for example, making snips in paper with scissors.

Understanding the World

- Explore how things work.

Expressive Arts and Design

- Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.
- Explore different materials freely, in order 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.
- Create closed shapes with continuous lines, and begin to use these shapes to represent objects.

Reception

Physical Development

- Progress towards a more fluent style of moving, with

developing control and grace.

- Develop their small motor skills so that they can use a range of tools competently, safely and confidently.
- Use their core muscle strength to achieve a good posture

when sitting at a table or sitting on the floor.

Expressive Arts and Design

- 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.

ELG Physical Development

Fine Motor Skills

- Use a range of small tools, including scissors, paintbrushes and cutlery.

ELG Expressive Arts and Design

Creating with Materials

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
- Share their creations, explaining the process they have used.

Term 1

Term 2

Term 3

Term 4

Term 5

Term 6

Time Travellers

Above and beyond

Telling Tales

A World Apart

Blue Planet

This is Me

Year 1

Technical Knowledge (CP)

Build Structures

1. Build a house for Noi
2. Build a boat
3. Build a treehouse or jungle bird
4. Design and make a bridge

Key Vocabulary

- Design
- Structure

Design & Make (CP)

African Masks

1. Use a range of equipment and different joining techniques

Spaceship

1. To select from and use a range of tools and equipment to perform practical tasks
2. make a spaceship for Mae

Key Vocabulary

- Design
- Structure

Cooking and Nutrition

Baking bread

Making pancakes

Where food comes from

1. To know where food comes from.
2. To understand where food comes from
3. To use the basic principles of a healthy and varied diet to prepare dishes
4. To select from and use a range of tools and equipment to

Design, Make and Evaluate

Spaceship

1. To design a spaceship.
2. To make a spaceship.
3. To evaluate own spaceship against a design criteria.

Key Vocabulary

- Planning
- Investigating
- Design
- Evaluate
- Make
- User
- Purpose
- Ideas
- Product

Design, Make and Evaluate

Plastic bag kite/parachute

1. To design what to do with a plastic bag?
2. To make a plastic bag kite
3. To evaluate a plastic bag kite

Key Vocabulary

- Planning
- Investigating
- Design
- Evaluate
- Make
- User
- Purpose
- Ideas
- Product

				<p>perform practical tasks</p> <p>5. To select from and use a wide range of ingredients, according to their characteristics</p> <p>Design, Make and Evaluate</p> <p>Moving Pictures</p> <ol style="list-style-type: none"> 1. To investigate a moving picture. 2. To design a moving picture. 3. To make a lever mechanism 4. To make a slider mechanism 5. To evaluate a moving picture. <p>Windmill structure</p> <ol style="list-style-type: none"> 1. To include individual preferences and requirements in my design. 2. To make a stable structure. 3. To assemble the components of my structure. 4. To evaluate my project and adapt my design. <p>Key Vocabulary</p> <ul style="list-style-type: none"> • Planning • Investigating • Design • Evaluate • Make • User • Purpose 			
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				<ul style="list-style-type: none"> • Ideas • Product 			
Year 2		<p>Design, Make and Evaluate</p> <p>Vehicles</p> <ol style="list-style-type: none"> 1. Evaluating existing car designs/models. Identify strengths/ weaknesses 2. Design own vehicle against given criteria. 3. Select appropriate materials to make a moving vehicle. 4. Evaluate design and make project- ICT link. <p>Key Vocabulary</p> <ul style="list-style-type: none"> • Investigating • planning • Design • Make • Evaluate • Purpose • Ideas • Design criteria • Wheels • Axles 		<p>Design, Make and Evaluate</p> <p>Silhouette animal puppets</p> <ol style="list-style-type: none"> 1. To explore the use of silhouette animation. 2. To design silhouette puppets in the style of Lotte Reiniger. 3. To be able to evaluate my ideas and products. 4. To explore the concept and features of structures and the stability of different shapes. 5. To explore strength in different structures 6. To understand that the shape of the structure affects its strength. 7. To make a structure according to design criteria. 8. To produce a finished structure and evaluate its strength, stiffness and stability. <p>Key Vocabulary</p> <ul style="list-style-type: none"> • Design • Make • Evaluate • Purpose • Ideas • Design criteria • Silhouette 	<p>Design, Make and Evaluate</p> <p>chocolate packaging</p> <ol style="list-style-type: none"> 1. To explore and evaluate chocolate bar packaging. 2. To design packaging for a new chocolate bar. 3. Making own wrapper (Making chocolate flow chart) 4. To evaluate your packaging design. <p>Key Vocabulary</p> <ul style="list-style-type: none"> • Design • Make • Evaluate • Purpose • Ideas • Design criteria • Packaging • Suitable 	<p>Cooking and Nutrition</p> <p>Fairy bread</p> <p>Anzac biscuits</p> <p>Sandwiches</p>	<p>Design, Make and Evaluate</p> <p>structure for trapeze artist</p> <ol style="list-style-type: none"> 1. To design a purposeful product for the circus. 2. Selecting materials and explaining why. 3. To build a structure using materials and tools. 4. Making structure stronger 5. To evaluate a design and build project. <p>Key Vocabulary</p> <ul style="list-style-type: none"> • design • make • evaluate • purpose • ideas • design criteria • stronger • structure

				• Puppet			
Year 3		Food Healthy and varied diet – linked to PSHE.	Electrical Systems - Simple circuits and switches & Simple programming and control Illuminated sign linked to our Science Light and The Owl who was Afraid of the Dark.	Textiles Traditional Tales Wolf puppets from fairy tales .	Mechanical systems - Levers and Linkages Fantasy Create a story a book.	Mechanical systems - Pneumatics Blue Planet Creating a moving Polar Bear (linked to Geography, English & Reading).	Structures - Shell structures This is Me Designing a desk tidy to remind them of Year 3.
Year 4		Pneumatics Create a Tutankhamun sarcophagus, push the syringe and out pops a mummy.	Textiles Christmas - Creating a gingerbread them or a reindeer using felt template and wool.	Electrical Systems Traditional Tales - Creating a puppet theatre using cardboard boxes and circuits to create light for the show.	Structures. Frame structures Fantasy, Adventure - Easter baskets or surprise boxes.	Mechanical systems. Levers and Linkages Blue Planet, Recycling – Robot Iron man with moving body part.	Food. Celebrating culture and seasonality This is Me – Designing a sandwich
Year 5		Mechanical systems. Pulleys or Gears – Astro moon clock with gears. Food. Celebrating culture and seasonality – Greek bread and dips.	Electrical Systems. More complex switches and circuits – Mars rovers or Moon buggies. Additional: K’Nex Space exercise bikes Gears and pulleys.	Structures. Frame structures – wooden mead halls.	Mechanical systems. Cams – story character dancing on book.	Electrical Systems. Monitoring and control – automatic night light using crumble kit. Automation and helping the environment. Environmental housing project – computer-aided design using Minecraft.	Textiles. Combining different fabric shapes – fashion accessory to accompany Alexander McQueen art topic.
Year 6		Food. Celebrating culture and seasonality Carrot cookies	Electrical Systems. More complex switches and circuits – Creating different circuits Textiles. Combining different fabric shapes - Creating Gonks to sell.	Traditional tales – shoe box scene using a Frame structures	Fantasy – Electrical Systems. Monitoring and control	Blue Planet – sculpture out of used plastic Structures. Frame structures	This is Me – Mechanical systems. Cams –