SPRING HILL DESIGN TECHNOLOGY CURRICULUM- EYFS

AUTUMN

Expressive Art and Design- Creating with Materials

Exploration, Sensory Play & Early Mark-Making
Focus: exploring materials freely, experimenting with tools, developing confidence

Colour Exploration, Painting Skills & Early Artistic Decisions
Focus: beginning to use colour purposefully, exploring paint techniques

Foundations: Enjoying Music, Stories & Imaginative Play
Focus: joining in, exploring sound, beginning imaginative play.

Singing with Confidence, Exploring Instruments & Early Storytelling
Focus: matching pitch, exploring sound, developing narrative foundations.

SPRING

Expressive Art and Design- Creating with Materials

Malleable Materials, Construction & Decoration
Focus: manipulating materials, early design thinking, joining techniques

Textiles, Collage & Creating Texture
Focus: exploring fabrics, combining materials, creating textures

Musical Shape, Group Performances & Developing Storytelling
Focus: singing with melodic shape, using instruments with purpose.

Story Development, Rhythm & Confident Group Performance
Focus: confident storytelling, rhythmic awareness, expressive performance.

SUMMER

Printing, Patterns & Collaborative Creating
Focus: deliberate pattern-making, printing techniques, teamwork

ELG Readiness: Independent Creating, Colour Choices & Purposeful Art
Children should now be working towards/meeting the ELG for Creating with Materials.

Creating Own Songs, Rhythm Patterns & Independent Narratives
Focus: creativity, rhythm copying, expressive language
ELG Readiness: Independent Performance, Improvisation & Storytelling
Children should now be working toward or meeting the ELG for Being Imaginative & Expressive.

SPRING HILL DESIGN TECHNOLOGY CURRICULUM- YEAR 1

AUTUMN

Are all food wraps healthy?

Lesson 1: To know where ingredients found in wraps come from by exploring products.

Lesson 2: To know how to cut, spread, grate and fold using the correct tools and equipment.

Lesson 3: To design and be able to talk about a healthy and appealing product.

Lesson 4/5: To select from and use a wide range of ingredients and equipment to make a wrap.

Lesson 6: To evaluate my ideas and product against a design criteria.

SPRING

How can I make my card move?

Lesson 1: To explore and understand how slider and lever mechanisms work.

Lesson 2: To know how to make a range of slider and lever mechanisms.

Lesson 3: To design a card with a slider or lever mechanism.

Lesson 5: To make a card with a slider or lever mechanism.

Lesson 6: To evaluate how well the mechanism in my card works.

SUMMER

How are hand puppets made?

Lesson 1: To share our thoughts about existing puppet products.

Lesson 2: To know how to join fabrics using a needle and thread. (Basic Running stitch)

Lesson 3: To design an attractive hand puppet.

Lesson 4: To know how templates help when working with fabrics.

Lesson 5: To choose from a range of materials to make a hand puppet.

Lesson 6: To evaluate my puppet against a given design criteria.

SPRING HILL DESIGN TECHNOLOGY CURRICULUM- YEAR 2

AUTUMN

Strong and Stable!

Lesson 1: To explore different types of structures.

Lesson 2/3: To know how to make a structure stronger, stiffer and more stable.

Lesson 4: To be able to design a structure (chair) and talk about how it is strong, stiff and stable.

Lesson 5: To select from and use a range of materials to construct a mock-up chair.

Lesson 6: To explore and evaluate the strength of our mock-up chairs.

SPRING

How do vehicles move?

Lesson 1: To know how wheel and axle products work.

Lesson 2: To know which construction materials are used to make wheel and axle mechanisms.

Lesson 3: To design a vehicle with a wheel and axle mechanism.

Lesson 5: To know how to construct a wheel and axle mechanism.

Lesson 6: To evaluate how well our wheel and axle mechanisms work.

SUMMER

Splendid Salads!

Lesson 1: To know where the ingredients found in salads come from and how salads can vary.

Lesson 2: To design a salad (using ICT) and discuss how it is different.

Lesson 3: To know how to use a range of equipment to prepare a salad dish.

Lesson 4: To evaluate how varied our salad dishes are.

SPRING HILL DESIGN TECHNOLOGY CURRICULUM- YEAR 3

AUTUMN

Perfect pizza choices!

Lesson 1: To explore and analyse a range of pizza toppings.

Lesson 2: To know that pizza ingredients are grown in different locations and during different seasons.

Lesson 3: To develop and communicate ideas for pizzas through discussion and annotated sketches.

Lesson 4: To select from and know how to use the appropriate tools to make our pizzas.

Lesson 6: To consider the views of others when evaluating my product.

SPRING

How do puppets work with linked levers?

Lesson 1: To analyse linked lever products and consider how appealing and fit for purpose they are.

Lesson 2: To practice making linked levers and understand how to strengthen the mechanism.

Lesson 3: To create a design criteria for linked levers.

Lesson 4: To create an annotated sketch of a puppet.

Lesson 5: To make a prototype of a puppet including linked levers.

Lesson 6: To consider the views of others when evaluating my product.

SUMMER

Hold it together!

Lesson 1: To investigate the different types of shell structures found in school.

Lesson 2: To know how shell structures are reinforced, stiffened and strengthened.

Lesson 3: To use research to develop a design criteria. To draw annotated sketches of their designs.

Lesson 4: To select from and use the appropriate construction materials to make a desk tidy.

Lesson 5: To evaluate how well their product meets their own design criteria.

SPRING HILL DESIGN TECHNOLOGY CURRICULUM- YEAR 4

AUTUMN

Make it move!

Lesson 1: To know how individuals like Elon Musk and Mary Jackson have shaped the world.

Lesson 2: To understand the mechanical system of a pulley and explore how they work

Lesson 3: To develop ideas and draw exploded diagrams to show our ideas for a pulley in a motorised car.

Lesson 4: To know which materials are the most functional and aesthetically pleasing for our products.

Lesson 5: To know which tools and pieces of equipment are needed to create our motorised car.

Lesson 6: To evaluate the effectiveness of our pulley systems.

SPRING

What makes a dip vegan?

Lesson 1: To know how individuals like Ella Woodward have promoted vegan dishes.

Lesson 2: To evaluate dips made for the vegan diet and communicate our ideas through discussion.

Lesson 3: To design our own product suitable for a vegan diet

Lesson 4: To know which ingredients and equipment are needed to make a vegan dip.

Lesson 5 : To evaluate their product using the views of others.

SUMMER

How can we carry it?

Lesson 1: I can explore different bags and learn about textile designs, explaining how their ideas inspire strong, useful and appealing designs.

Lesson 2:I can design a book bag for a specific user, using appealing decorations and motifs linked to a favourite story.

Lesson 3:I can explain the purpose of different stitches and how I used tools safely.

Lesson 4/5:I can sew fabric pieces together neatly and securely to create my book bag.

Lesson 6I can test my bag for strength and use and explain how well it meets my design goals, suggesting improvements.

SPRING HILL DESIGN TECHNOLOGY CURRICULUM– YEAR 5

AUTUMN

How do automata toys move?

Lesson 1: To understand the mechanical system of CAMS.

Lesson 2: To choose a range of tools and equipment to make CAM mechanisms.

Lesson 3: To research and develop a design criterion for an appealing automaton character display.

Lesson 4: To develop my automaton character display ideas through computer aided design.

Lesson 5: To accurately use a range of tools and equipment to create our products.

Lesson 6: To evaluate our products against our design criteria.

SPRING

Light it up!

Lesson 1: To develop an awareness of how Smart Home devices work. (lights, thermostat, speakers, security cameras)

Lesson 2: To develop annotated diagrams to explain how Smart Home Devices work.

Lesson 3: To know how sensors are used in Smart Home Devices (AI systems- programming)

Lesson 4: To develop ideas using computer aided design (sensored night light)

Lesson 5: To communicate ideas through exploded diagrams.

Lesson 6: To use prototypes to model our ideas.

Lesson 7: To evaluate their product using the views of others.

SUMMER

What can we add to our stew?

Lesson 1: To know where and when ingredients found in stew are grown. To know that some ingredients are reared, caught and processed.

Lesson 2: To evaluate existing stews, discuss the healthiness of them and develop a design criterion.

Lesson 3: To design a healthy stew using annotated sketches to share our ideas.

Lesson 4: To model the process of making our stew using a design diagram.

Lesson 5: To accurately use the correct tools to make our stew.

Lesson 6: To evaluate our product, using the views of others to help improve it.

SPRING HILL DESIGN TECHNOLOGY CURRICULUM- YEAR 6

AUTUMN

Who's the king of burgers?

Lesson 1: To know where and when, ingredients which are found in burgers, are grown and how they are processed.

Lesson 2: To analyse different burgers and develop a design criterion.

Lesson 3: To develop ideas for our own burgers and communicate our ideas through discussion.

Lesson 4: To prepare and cook a variety of burgers.

Lesson 5: To evaluate our products and consider the views of others to improve them.

SPRING

How will I keep my equipment safe?

Lesson 1: To understand how designers help to shape the world of fashion.

Lesson 2: To evaluate existing products based on their innovative design and functionality.

Lesson 3: To design an appealing pencil case and communicate our ideas using cross sectional diagrams.

Lesson 4/5: To know how to join and finish materials using cross, back and running stitch.

Lesson 6: To evaluate our products based on their functionality.

SUMMER

Light it up!

Lesson 1: I can describe features of Gothic design using key vocabulary.

Lesson 2: I can explain how electrical circuits work.

Lesson 3: I can create a labelled design showing Gothic style and electrical features.

Lesson 4/5: I can build a stable structure and add an electrical feature.

Lesson 6: I can evaluate the success of the model against design criteria.