

SPRING HILL DESIGN TECHNOLOGY

CURRICULUM- EYFS



AUTUMN

- Junk Modelling**
Exploring junk modelling
Cutting and scissor skills
- Construction**
Making models-house for the pigs
- Cooking and nutrition**
Fine motor skills (chopping)
Baking Bread
- Textiles**
Explore threading and weaving
- Structures**
Materials-3 little pigs

SPRING

- Junk modelling**
Exploring junk modelling
Cutting and scissor skills
- Construction and Structures**
Making models-bridge building for the Gingerbread Man
- Cooking and nutrition**
Fine motor skills (chopping)
Fruit kebabs
- Textiles**
Explore threading and weaving

SUMMER

- Junk modelling**
Exploring junk modelling
Cutting and scissor skills
- Construction**
Making models-building animal pens for the farm animals
- Cooking and nutrition**
Fine motor skills (chopping)
- Textiles**
Explore threading and weaving
- Structures**
Floating and sinking-boat investigation (Link to science-I am a scientist lesson 3)

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: To know how the industrial revolution helped shape the history of bags. (Margaret Knight)

Lesson 2: To analyse a range of existing tote bags and develop a design criterion.

Lesson 3: To generate and communicate ideas through annotated sketches. (Tote bag)

Lesson 4: To create pattern pieces to aid construction of our Tote bag designs.

Lesson 5/6: To know how to use different stitch types to join fabrics for a prototype. (cross, back and running)

Lesson 6: To evaluate our prototypes against the design criterion.

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: To evaluate existing frame structures found around school. To develop a design criterion.

Lesson 2: To understand how frames are joined, strengthened, stiffened and reinforced.

Lesson 3: To understand how electrical systems work (buzzers, switches, motors)

Lesson 4: To design a frame structure suitable for a school entrance way (welcome sign etc)

Lesson 5/6: To select from and accurately use equipment and tools to create our frame structures.

Lesson 7: To evaluate our products based on their functionality