



# 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

Gingerbread Men

Pancakes

### **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