Godfrey Ermen Primary School
Unit overviews Year 5

Autumn	Spring	Summer
Mechanisms - Pop up book	Digital World – Monitoring Device	Cooking and Nutrition - Developing a recipe
Lesson 1: Mind Map Aim: Design a pop-up book page WINS: -Design a book including a mixture of structures and mechanisms. -Know that mechanisms control movement. Lesson 1 – Attention Grabber and Main Event **Lesson 2:** Aim: Follow a design brief to make a pop-up book WINS: -Use paper, card and glue to make a book structure -Make mechanisms and structures using sliders, pivots and folds to create movement. Lesson 2 – Attention Grabber and Main Event **Lesson 3**: Aim: Use layers and spacers to cover the working of mechanisms WINS: -Complete the mechanisms and structures from a design template -Use layers and spacers to make a book look more attractive Lesson 3 – Attention Grabber and Main Event **Lesson 4:** Aim: Create a high-quality product suitable for a target user. WINS: -Complete the surface decoration by adding pictures and captions. -Consider the preferences and needs of the user Lesson 4 – Attention Grabber and Main Event	**Lesson 1:** Mind Map Aim: Carry out research to develop design criteria. WINS: -Research a particular animal's needs -Develop a design criteria based on research Lesson 1- Full lesson **Lesson 2**: Aim: Write a program for a monitoring device including an alert. WINS: -Program to monitor the ambient temperature and code an alert when the temperature goes outside a specified range. -Explain key functions in my program -Explain how my product would be useful for an animal carer Lesson 2 – Full lesson **Lesson 3:** Aim: Generate micro:bit housing ideas WIN: -Generate multiple housing ideas using building bricks Lesson 3 – Main Event only **Lesson 4:** Aim: Learn about and practise 3D CAD skills. WINS: -Understand what a virtual model is and the pros and cons of traditional and CAD modelling -Place and manoeuvre 3D objects using CAD -Change the properties of 3D objects using CAD Lesson 4 – Main Event only	**Lesson 1**: Mind Map. Aim: Understand how ingredients are reared and processed WINS: -Identify the ingredients in spaghetti Bolognese -Explain the journey of an ingredient from farm to table -Create an informative poster Lesson 1 – Attention Grabber and Main Event **Lesson 2:** Aim: Make adaptations to design a recipe WINS -Compare two Bolognese sauces -Research unique ingredients in different recipes -Plan an adaptation of a basic recipe Lesson 2 – Full lesson **Lesson 3:** Aim: Practise food preparation skills WINS: -Cut resistant foods safely and accurately -Understand the safety aspects of working with hot food -Explain how to avoid cross-contamination Lesson 4 – Full lesson **Lesson 4:** Aim: Design a product label Aim: Follow and make an adapted recipe. WINS: -Design a label thinking about colours, ingredients and the contents of the jar. -Use an adapted recipe make bolognese While one group is following Lesson 6 Main Event rest of class follow Lesson 5 attention Grabber and Main Event

Godfrey Ermen Primary School
Unit overviews Year 5

Lesson 5 Aim: Evaluate using a design criteria. WINS -Evaluate my work -Evaluate the works of others Lesson 4 – Wrapping Up Complete Mind Map and Assessment task	**Lesson 5** Aim: Evaluate a monitoring device against a design criteria. WINS: -Describe final design ideas and Micro:bit program. -Identify what could be improved and why Lesson 4 'Wrapping Up' section Complete Mind Map Assessment task	**Lesson 5** Aim: Evaluate using a design criteria. Complete Mind Map Assessment task shown below
Please note some of these lessons may take more than one session to complete and 'blocking' units into weeks is at teachers' discretion.		
Use the image to help you answer the questions. 1 Why place spacers on either side of a slider? 2 How can you hide a slider or pivot mechanism in a pop-up book?	 What is a monitoring device? Include an example and explain how it works	 Can you explain how to improve the nutritional value of a meal?

Godfrey Ermen Primary School
Unit overviews Year 5

Aesthetic	Boolean	adaptation
Caption	Workplane (CAD)	cook
Design brief	Durable	cross-contamination
Function	Monitoring device	hygiene
Mechanism	Sensor	ingredients
Motion	Synthetic	label
Prototype	Variable	nutrient
Slider	Versatile	nutritional value
Template		process