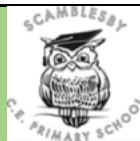




Design Technology – Medium Term Planning

Y3/4 Badger Class



SCAMBLESBY CofE PRIMARY SCHOOL: MEDIUM TERM-PLANNING Y3/4 Design Technology Autumn Year A

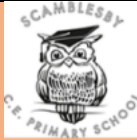
Milestone 2 PAPER CIRCUITS (2.3) p191

Master practical
skills

Design, make,
evaluate and
improve

Take inspiration from design throughout history				
Vocabulary				
Session	Learning Objective	Learning questions and Success criteria		Lesson outline
1	To classify and present data, identifying common appliances that run on electricity.	What does the word conduct mean? SC: To identify what the word conduct means. (Basic) SC: To identify and sort appliances through their power source. (Advancing) SC: To classify appliances and discuss why they require that power source. (Deep)		
2	To identify circuit components and build working circuits.	What components are required to create a completed circuit? What happens if we change the components? SC: To identify each component. (B) SC: To identify each component and complete a design (A) SC: To investigate the difference between LED and a cfl bulb. (D)		
3	To investigate which materials are electrical conductors or insulators.	What materials conduct electricity? What materials do not conduct electricity? How can we investigate this? SC: To create a circuit and use different materials. (B) SC: To explain what a conductor and insulator is. (A) SC: To (D)		
4	To explain how a switch works in a circuit, build switches and report my findings.	What components will you need? How will you create your circuit? How will you create your switch? SC: To use all knowledge gained so far and create a prototype. (B) SC: To use copper tape and accurate measurements practice creating a push switch and close page switch. (A) SC: To research different types of switches. And create a circuit using chosen switch. (D)		
5	To discuss and solve problems about electricity using reasoning skills.	Was your design effective? Did it meet the design criteria? SC: To evaluate effectiveness of product. (B) SC: To create a rethink analysis to explain your changes. (A) SC: To identify the effectiveness and rethink design. (D)		
6				
Assessment				

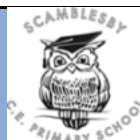
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SCAMBLESBY CofE PRIMARY SCHOOL: MEDIUM TERM-PLANNING Y3/4 Design Technology Spring Year A

Milestone 2 FRAME STRUCTURES (2.6) p24			
Master practical skills			
Design, make, evaluate and improve			
Take inspiration from design throughout history			
Vocabulary			
Session	Learning Objective	Learning questions and Success criteria	Lesson outline

1	To identify frame structures in the world and explain why they are used..	What is a frame structure? What is its purpose? SC: To know what a frame structure is. (Basic) SC: To understand how frame structures are used within a building or structure. E.g green house. (Advancing) SC: To research frame structures and discuss their importance. (Deep)	
2	To investigate stable structures.	How is a frame structure created? What gives a frame structure its strength? SC: To understand the term stable.(B) SC: To identify factors that make a structure stable. (A) SC: To discuss how to make a structure more/ less stable. (D)	
3	To create frame structures from different materials and test their strength.	What materials will best create strength? How will the materials be best connected together to maintain the structures stability? SC: To identify suitable materials. (B) SC: To explain why these materials are suitable. (A) SC: To discuss ways of joining these two materials together. (D)	
4	To design and make a frame structure suitable for the brief and specification given.	How will you ensure your drawn design will become a structure? What steps do you need to take? SC: To apply their knowledge of stable structures and suitable materials when designing. (B) SC: To follow specific design criteria. (A) SC: To identify possible challenging parts of their design/help others to find solutions. (D)	
5	To carefully measure, cut, saw to ensure the dimensions are correct and use appropriate joining techniques.	What steps do you need to take to ensure your product is created successfully? SC: To follow a design to create a successful product. (B) SC: To amend their design to improve a product/give suggestions to others as solutions to problems. (A) SC: To work safety and sensibly with a range of materials and tools. (D)	
6	To evaluate the effectiveness of the product by referring to the specification.	What was successful about your design and product? What would you change if you were to redo your product? SC: To understand the importance of evaluating a finished product. (B) SC: To identify what has been successful with their design. (A) SC: To identify any improvements that could be made to the design. (D)	
Assessment			



MEDIUM TERM-PLANNING Y3/4 Design Technology

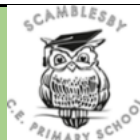
Summer Year A

Milestone 2

FOOD (2.8) Vegetable Soup, p277

Master practical skills			
Design, make, evaluate and improve			
Take inspiration from design throughout history			
Vocabulary			
Session	Learning Objective	Learning questions and Success criteria	Lesson outline
1	To investigate and analyse existing products according to the characteristics of the chosen food source.	What makes a good soup? SC: To research existing products. (B) SC: To label and annotate soup designs showing their unique design features. (A) SC: To discuss soup nutritional value and how they include this and good taste. (D)	
2	To develop a design criteria costings.	What ingredients will you need? How will you present your design? SC: To use the internet and cookery books to create a mood board. (B) SC: To use real life experiences and influence create a mood board to show proposed design. (A)	

		SC: To experiment with different ways of presenting your design that is clear, and gives accurate details. (D)	
3	To select ingredients and kitchen equipment to make product following a recipe	What ingredients do you need? What equipment do you need? SC: To make the first prototype of your soup. (B) SC: To use culinary skills and produce a soup following a recipe. (A) SC: To demonstrate refined culinary skills and create a soup. (D)	
4	. To evaluate the final product.	Why was your soup successful? What would you change? SC: To evaluate the product after taste testing. (B) SC: To discuss the decisions made and what modifications you would make. (A) SC: To explain why it is important to continually improve and perfect your techniques when preparing and cooking food. (D)	
Assessment			



SCAMBLESBY CofE PRIMARY SCHOOL: MEDIUM TERM-PLANNING Y3/4 Design Technology Autumn Year B

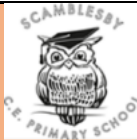
Milestone 2

LINKED LEVERS (2.4) p.209

Master practical
skills

Design, make, evaluate and improve			
Take inspiration from design throughout history			
Vocabulary			
Session	Learning Objective	Learning questions and Success criteria	Lesson outline
1	To identify levers and linkages in the real world.	What is a mechanism? What is a mechanical system? SC: To identify mechanisms. (Basic) SC: To explore how leavers and linkages are used in everyday household products. (Advancing) SC: To understand how a range of mechanisms create movement. (Deep)	
2	To identify different mechanisms and how to make them.	What are mechanisms used in? How are they made? SC: To use correct technical vocabulary. (B) SC: To show understanding of mechanical systems such as levers and linkages and how they create movement. (A) SC: To explore and use mechanisms such as flaps, sliders and levers. (D)	
3	To design a product meeting the needs of the user.	Who is your consumer? What materials are you going to need for your design? SC: To create realistic ideas, focusing on the need of the user. (B) SC: To share and clarify ideas through discussions. (A) SC: To create a design with high specifications and adjust in accordance to feedback. (D)	
4	To use a range of techniques to create a prototype of developing ideas.	What materials and tools for you need? How will you assemble your product? SC: To create a design to a specification. (B) SC: To measure, mark cut, cut and shape materials and components with some accuracy. (A) SC: To assembly, join and combine materials and components with accuracy, safety. (D)	

5	To use a range of techniques to complete final and testing against design criteria.	How will you test your product? <i>SC: To use a wide range of materials and components. (B)</i> <i>SC: To use their design criteria to evaluate their completed product. (A)</i> <i>SC: To test the product against the design criteria to assess its suitability. (D)</i>	
6	To evaluate final product and consider the views of others.	Was your product effective? <i>SC: To use correct technical vocabulary to evaluate their project. (B)</i> <i>SC: To identify the strengths and areas for development in their ideas and product. (A)</i> <i>SC: To consider the views of others, including intended users, to improve their work. (D)</i>	
Assessment			



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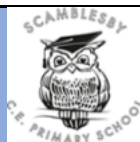
Milestone 2

PNEUMATICS

Design, make, evaluate and improve	

Take inspiration from design throughout history				
Vocabulary				
Session	Learning Objective	Learning questions and Success criteria		Lesson outline
1	To investigate a variety of familiar objects that use air to make them work.	What toys use pneumatics? SC: To recognise familiar objects that use air to make them work. (Basic) SC: To describe how the objects use air to make them work. (Advancing) SC: To suggest alternative uses for these familiar objects. (Deep)		
2	To investigate techniques for making simple pneumatic systems.	How does a pneumatic system work? SC: To explain how simple pneumatic systems work using appropriate vocabulary. (B) SC: To create simple pneumatic systems. (A) SC: To suggest ways of using these pneumatic systems in design. (D)		
3	To design a moving model including one moving part.	What moving part do you want your design to have? How will you make it move? SC: To investigate ways of using pneumatic systems with other materials to control movement. (B) SC: To know of different techniques for joining and fixing components. (A) SC: To make effective pneumatic systems. (D)		
4	To create a design including a moving pneumatic system.	How will you create this design? What materials and tools will you need? What problems may occur? SC: To use their knowledge of pneumatic systems to design a moving product. (B) SC: To describe what materials and components they will need to create their product. (A) SC: To identify areas that could be improved upon in their design. (D)		
5	To create the design with a moving pneumatic part.	What adjustments need to be made to complete your product? SC: To create a product based on a design. (B) SC: To conduct an effective pneumatic system to control movement. (A) SC: To work safely and effectively with a range of tools and techniques. (D)		
6	To evaluate the design and highlight any successes and changes.	Was your product successful? Did it meet the design criteria? SC: To identify successful areas of their finished product. (B) SC: To identify areas that could be improved upon. (A) SC: To describe what they would do differently if they were to make their moving product again. (D)		

Assessment	
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SCAMBLESBY CofE PRIMARY SCHOOL: MEDIUM TERM-PLANNING Y3/4 Design Technology Summer Year A

Milestone 2

FOOD (2.9) Dips, p.293

Master practical skills			
Design, make, evaluate and improve			
Take inspiration from design throughout history			
Vocabulary			
Session	Learning Objective	Learning questions and Success criteria	Lesson outline

1	To investigate and analyse existing products according to the characteristics of the chosen food source.	What is a dip? What are the properties of a dip? <i>SC: To explain why it is important for all dips to have a spoon-able consistency. (Basic)</i> <i>SC: To evaluate and explore existing products exploring the textures and ingredients.. (Advancing)</i> <i>SC: To evaluate the design and taste of existing products providing critical feedback. (Deep)</i>	
2	To develop a design criteria.	What will your product be? Who are your captive audience? <i>SC: To research dips and create a mood bord. (B)</i> <i>SC: To research and create an annotated mood board to create a recipe. (A)</i> <i>SC: To create a mood board showing alternate recipe designs. (D)</i>	
3	To select ingredients and kitchen equipment to make product following a recipe.	What ingredients do you need? What equipment do you need? Do you need to cook your ingredients? <i>SC: To safely cut vegetables and use equipment. (B)</i> <i>SC: To successful use equipment and produce a prototype. (A)</i> <i>SC: To produce a premium prototype identify vital ingredients(D)</i>	
4	To evaluate product.	What are your consumer thoughts? What is your product cost analysis? <i>SC: To allow other people to taste test and create a result chart. (B)</i> <i>SC: To conduct consumer research and identify what modifications could be made. (A)</i> <i>SC: To identify their manufacturing costs and the price of sale and justify their product pricing. (D)</i>	
Assessment			