

EASTRY C OF E PRIMARY SCHOOL KNOWLEDGE ORGANISERS



YEAR GROUP	4
SUBJECT	Design and Technology
KEY VOCABULARY	 Diorama Annotated Prototype Electrical system Textiles Variety Circuit Prepare Alter Ingredients
END POINTS	Design
KNOWLEDGE	 I can research for design ideas I can show a design meets a range of requirements and is fit for purpose I can begin to create own design criteria I can have at least one idea about how to create product and suggest improvements for design. I can produce a plan and explain it to others say how realistic plan is. I can use an annotated sketch I can make and explain design decisions considering availability of resources I can make a prototype.



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- I can select suitable tools and equipment and explain my choices in relation to required techniques and how to use accurately
- I can select appropriate materials, fit for purpose; explain choices
- I can work through a plan in order.
- I can realise if my product is going to be good quality
- I can measure, mark out, cut and shape materials/components with some accuracy
- I can assemble, join and combine materials and components with some accuracy apply a range of finishing techniques with some accuracy

<u>Evaluate</u>

Make

- I can refer to design criteria while designing and making
- I can use criteria to evaluate product
- I can begin to explain how I could improve original design
- I can evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose
- I can discuss by whom, when and where products were designed

Technical knowledge: materials / structures

- I can measure carefully to avoid mistakes.
- I can attempt to make the product strong
- I can continue working on product, even If original didn't work
- I can make a strong, stiff structure

Technical knowledge: mechanisms

- I can select the most appropriate tools / techniques
- I can explain alterations to product after checking it



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- I can grow in confidence about trying new / different ideas.
- I can use levers and linkages to create movement
- I can use pneumatics to create movement

Technical knowledge: Textiles

- I can begin to devise a template
- I can think about user when choosing textiles
- I can think about how to make a product strong
- I can explain how to join things in different ways
- I can understand that a simple fabric shape can be used to make a 3D textiles project •

Technical knowledge: Food and nutrition

- I can explain how to be safe/hygienic
 - I can consider presenting product in interesting/ attractive ways

• I can understand that ingredients can be fresh, pre-cooked or processed Begin to understand about food being grown, reared or caught in the UK or wider world

- I can describe how a healthy diet variety / balance of food and drinks
- I can explain importance of food and drink for active, healthy bodies
- I can prepare and cook some dishes safely and hygienically
- I can use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking

Technical knowledge: Electrical systems

- I can use a number of components in circuit
- I can program a computer to control product •

IT HELPS IF I ALREADY	I can begin to research others' needs
KNOW	I know how a design meets a range of requirements
	I can describe the purpose of product



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I can follow a given design criteria
I can have at least one idea about how to create product
I can create a plan which shows order, equipment and tools
I can describe design using an accurately labelled sketch and words
I can make design decisions
I can explain how a product will work
I can make a prototype
I can select suitable tools/equipment, explain choices; begin to use them accurately
I can consider how good product will be
I can measure, mark out, cut and shape materials/components with some accuracy
I can assemble, join and combine materials and components with some accuracy
I can apply a range of finishing techniques with some accuracy
I can look at design criteria while designing and making
I can say what I would change to make design better
I can begin to understand by whom, when and where products were designed
I can name some inventors/designers/engineers/chefs/manufacturers of ground -breaking product
I can begin to make strong structures
I can alter products after checking, to make it better
I can use simple lever and linkages to create movement
I can join different textiles in different ways
I can choose textiles considering appearance and functionality
I can begin to understand that a simple fabric shape can be used to make a 3D textiles project
I can carefully select ingredients
I can use equipment safely
I can make a product look attractive
I can prepare and cook some dishes safely and hygienically
Grow in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing,
spreading, kneading and baking