

Curriculum Vocabulary. Year 4 Design and Technology

	Objectives	Skills. National Curriculum.	Vocabulary and Curriculum Links
Autumn Homes Building homes from a template-strengthen structures	- I can research a designer, inventor, engineer who has developed ground breaking home. - I can develop my own design criteria and design my shelter. - I can make measure, mark out, cut and shape materials with some accuracy. - I can evaluate shelters identifying strengths and areas for developments. - I can apply a range of finishing techniques, including those from art and design, with some accuracy.	KS2 Areas of study: <u>Designing – Understanding contexts, users and purposes</u> - D1 work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment - D2 describe the purpose of their products - D3 indicate the design features of their products that will appeal to intended users - D4 explain how particular parts of their products work - D5 gather information about needs and wants of particular individuals and groups - D6 develop their own design criteria and use these to inform their ideas Designing - Generating, developing, modelling and communicating ideas - D7 share and clarify ideas through discussion - D8 model their ideas using prototypes and pattern pieces - D9 use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas - D10 use computer-aided design to develop and communicate their ideas - D11 generate realistic ideas, focusing on the needs of the user - D12 make design decisions that take account of the availability of resources <u>Evaluating – Own ideas and products</u> - E1 identify the strengths and areas for development in their ideas and products - E2 consider the views of others, including intended users, to improve their work - E3 refer to their design criteria as they design and make - E4 use their design criteria to evaluate their completed products Evaluating – Existing products Pupils will be taught to investigate and analyse: - E5 how well products have been designed and made	shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating, font, lettering, text, graphics, decision,
Spring Soup Looking at product packaging and flavours-making own	- I can understand that food is grown, reared or caught in the UK and the wider world. - I can understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The Eatwell Plate.	- E1 identify the strengths and areas for development in their ideas and products - E2 consider the views of others, including intended users, to improve their work - E3 refer to their design criteria as they design and make - E4 use their design criteria to evaluate their completed products Evaluating – Existing products Pupils will be taught to investigate and analyse: - E5 how well products have been designed and made	Ingredients Arranging Choosing Core Cutting Diet Flesh Healthy Investigating Peeling Pip

Summer North America Totem Pole design made from recycled materials.	• I can research a chef who has developed a ground breaking product (soup). • I can plan a healthy soup. • I can prepare food for cooking soup hygienically and safely. • I can understand that to be active and healthy, food and drink are needed to provide energy for the body. • I can gather information about needs and wants of particular individuals and groups. (deciding on each section of totem pole). • I can develop a simple design specification to guide my thinking using annotated sketches. • I can use computer aided design to develop and communicate my ideas. • I can order the main stages of Making – Practical skills and techniques.	• E6 why materials have been chosen • E7 what methods of construction have been used • E8 developed ground-breaking products • E9 how well products work to achieve their purposes • E10 how well products meet user needs and wants. • E11 who designed and made the products • E12 where and when products were designed and made • E13 whether products can be recycled or reused Evaluating – Key events and individuals • E14 about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products <u>Making - Planning</u> • M1 select tools and equipment suitable for the task • M2 explain their choice of tools and equipment in relation to the skills and techniques they will be using • M3 select materials and components suitable for the task • M4 explain their choice of materials and components according to functional properties and aesthetic qualities • M5 order the main stages of making Making – Practical skills and techniques • M6 follow procedures for safety and hygiene • M7 use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components • M8 measure, mark out, cut and shape materials and components with some accuracy • M9 assemble, join and combine materials and components with some accuracy • M10 apply a range of finishing techniques, including those from art and design, with some accuracy <u>Technical knowledge – Making products work</u>	Popular Seed Skin Slicing Squeezing Tasting Fruit And Vegetable Names, Names Of Equipment And Utensils Sensory Vocabulary E.g. Soft, Juicy, Crunchy, Sweet, Sticky, Smooth, Sharp, Crisp, Sour, Hard shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating,
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	• I can assemble, join and combine materials and components with some accuracy. • I can use my design criteria to evaluate my completed products Evaluating – Existing products.	• T1 how to use learning from science and maths to help design and make products that work • T2 that materials have both functional properties and aesthetic qualities • T3 that materials can be combined and mixed to create more useful characteristics • T4 that mechanical and electrical systems have an input, process and output • T5 use the correct technical vocabulary for the projects they are undertaking • T6 how mechanical systems such as levers and linkages or pneumatic systems create movement • T7 how simple electrical circuits and components can be used to create functional products • T8 how to program a computer to control their products • T9 how to make strong, stiff shell structures • T10 that a single fabric shape can be used to make a 3D textiles product • T11 that food ingredients can be fresh, pre-cooked and processed <u>Cooking and nutrition – Where food comes from</u> • C1 that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens • C2 and cattle) and caught (such as fish) in the UK, Europe and the wider world • C3 how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source • C4 how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking • C5 that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The Eatwell Plate • C6 that to be active and healthy, food and drink are needed to provide energy for the body	ribbing, laminating, font, lettering, text, graphics, decision, product, material, method, construction, purpose,
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