Newport Infant School and Nursery Design and Technology KS1 Curriculum

Year 1 End Points

What children at Newport Infant and Nursery School will know and do by the end of Year 1:

To know how to design a product using two given design criteria.
To develop design ideas by talking and drawing.
To select and use materials including textiles beginning to know about the characteristics of materials.
To use tools and equipment to perform practical tasks such as cutting and joining using scissors and tape.
To explore and verbally evaluate a range of existing products and evaluate their ideas against two given design criteria.
To use a simple slider to make a moving picture.
To explore and begin to know how a structure can be made stronger, stiffer and more stable.
I know how to use a winding mechanism.

Autumn	Spring	Summer
Design: I understand the purpose of a design criteria. I know how to design a product using a one given design criteria when making a kite. I can develop my ideas through talking and drawing. I am beginning to chose materials considering their function and properties	Design: I know how to design a house for a little pig. I can design my house against one given design criteria. I can develop my ideas through talking and drawing.	Design: I can design a healthy lunch box using my I know what contributes healthy eating and varied diets. I know how to design a product for another user using two design criteria.
Make: I can use a simple slider to make a moving picture. I can use scissors and tape to perform practical tasks of cutting and joining. I can select and use materials and beginning to understand the need to consider the characteristics of the material. I know that materials have different characteristics	Make: I can use a range of tools to cut and join my 3 Little Pig House. I can use different cutting and joining tools to make a shield	Make: I can select and use ingredients for my healthy lunchbox.
Evaluate: I can explore a range of products. I know how to evaluate a product. I am beginning to evaluate my ideas against one design criteria.	Evaluate: I can evaluate my idea against one design criteria and talk about what I liked about my product.	Evaluate: I can verbally evaluate a range of existing products. I know how to evaluate my ideas against two design criteria and talk about what skills I needed to use.
Technical Knowledge: I can make a slider for a moving pictures (Side to side) I know what a slider is	Technical Knowledge: I know how a structure can be made stronger, stiffer and more stable. I can use a winding mechanism. I can build a structure	Technical Knowledge: I can use a simple slider in my design.(up and down) I know what a slider os

Vocab:

Planner ideas product food names Investigating Design Evaluate Make User
Purpose utensil names sensory vocabulary: rough, smooth, hard, soft, prickly, bumpy… slider lever slot bridge/guide
Card masking tape paper fastener join pull push up down curve straight
Forward backward square rectangle cuboid cube cylinder cut fold fix structure
Wall tower framework weak strong base top weak strong base top underneath side edge
surface thinner thicker corner point straight curved metal wood plastic circle triangle

Year 2 End Points

What children at Newport Infant and Nursery School will know and do by the end of Year 2:

To design a product for themselves or others using three given and agreed design criteria.
To develop ideas by talking, drawing and mock ups using ICT when appropriate.
To select and use materials including textiles and construction materials, knowing, and explaining the characteristics of the materials used.
To select tools and equipment to perform the practical tasks of cutting, shaping and joining using scissors, sticky tape, masking tape and blue tac.
To select and use ingredients.

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To explore and evaluate a range of existing products and evaluate their own ideas against three design criteria, suggesting improvements, identifying skills and difficulties.
To make a simple lever using a pivot point on a slider.
To know how a structure can be made stronger, stiffer and more stable.

Autumn	Spring	Summer
Design: I can design a product using two given design criteria, applying our previously learnt knowledge. I know how to use mock ups, talking and drawing to develop my ideas and thoughts.	Design: I can design a product. I am beginning to develop a success criteria through whole class collaboration. I know how to use mock ups, talking and drawing to develop my ideas and thoughts and using ICT.	Design: I can design a product, choosing the user to match against three given design criteria. I know how to use mock ups, talking and drawing to develop my ideas and thoughts and using ICT.
Make: I can use some tools and equipment to perform the practical tasks of cutting, joining and shaping. (scissors, sticky tape, masking tape, blue tac) I can select and use a range of materials and explain their characteristics. I understand how a materials characteristic can help my design	Make:	Make: I can use tools and equipment to perform the practical tasks of cutting, shaping and joining. I know how to use new tools such as a staple, glue stick, glue gun, double sided sticky tape.
Evaluate: I can evaluate my ideas against two design criteria, highlighting if I have met them or not and if not why?	Evaluate: I know how to evaluate my ideas against two design criteria making suggestions on how it can be improved. I can verbally evaluate a range of existing products.	Evaluate: I can evaluate my ideas against two design criteria making suggestions on how it can be improved and identify skills and difficulties. I can evaluate a range of existing products.
Technical Knowledge:	Technical Knowledge: I know how to make a structure stronger, stiffer and more stable. I can adapt a structure to make it stronger, stiffer and more stable	Technical Knowledge:

Vocab:

Planner		ideas		product		food names				Investigating			Design			Evaluate				Make				User
Purpose		utensil names				sensory vocabulary: rough, smooth, hard, soft, prickly, bumpy…							slider			lever				slot				bridge/guide
Card		masking tape				paper fastener		join			pull		push		up			down			curve			straight
Forward			backward			square			rectangle			cuboid			cube			cylinder			cut		fold		fix		structure
Wall		tower		framework		weak		strong		base		top		weak		strong		base		top		underneath		side		edge
surface		thinner		thicker		corner		point		straight			curved			metal			wood			plastic		circle		triangle	
Function		design		criteria		stiff		strong		assemble			material			pivot				names of tools used				shaping		finishing	

Yellow highlight indicates this is a revisit/review

Assessment at the end of the year is against the National Curriculum. The Design and Technology Statements are:

Pupils should be taught to:

Key stage 1

Through a variety of creative and practical activities, pupils should be taught the

knowledge, understanding and skills needed to engage in an iterative process of designing

and making. They should work in a range of relevant contexts [for example, the home and

school, gardens and playgrounds, the local community, industry and the wider environment].

When designing and making, pupils should be taught to:

Design

 design purposeful, functional, appealing products for themselves and other users based on design criteria

 generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

 select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]

 select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

explore and evaluate a range of existing products

evaluate their ideas and products against design criteria

Technical knowledge

build structures, exploring how they can be made stronger, stiffer and more stable

explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.1