



Design and Technology Curriculum

EYFS to Year 6

Overarching Principles

Design and Technology

Subject Vision

At Abingdon, Design and Technology provides our children with a real-life context for learning that enables them to use their creativity and imagination to design, make and evaluate products that solve real and relevant challenges to give a meaning to learning.

Design and Technology prepares children with the skills to deal with tomorrow's rapidly-changing world. It encourages children to become independent, creative problem-solvers and thinkers as individuals and as part of a team.

At Abingdon Primary school, every child will have the opportunity to learn and extend their understanding, experience and application in the use of technology. Through the DT curriculum, children should be inspired by engineers, designers, chefs and architects to enable them to create a range of structures, mechanisms, textiles, electrical systems and food products that serve a real-world purpose.

Subject Intent

The primary intent for our Design and Technology Curriculum:

- Children to recognise the impact of design and technology in everyday life and the wider world
- Children to know that DT is a subject – where they learn to make and evaluate things effectively
- Children to be confident and safe with a range of simple tools – able to choose and select them safely and sensibly
- Children to learn how to take risks, become resourceful, innovative, enterprising and capable citizens
- Leave KS2 with a firm grasp of the design, make, evaluate cycle, through the 5 key areas of DT:
 - Food Technology
 - Textiles
 - Structures
 - Mechanisms
 - Electrical Systems (linked to Computing curriculum)

Whilst these are discrete strands, the knowledge and skills gained in each are interdisciplinary – and applied and built upon sequentially across the curriculum.

Teaching and Learning Overview

Abingdon Classroom: This is how we do it....		
Behaviour for learning		
Positive relationships • Mutual respect • Emotional support	Effective learning environment • Working walls • Celebration of learning	Engaging and relevant curriculum • Inclusive • Diverse
Effective Teaching and Learning		
Builds on and activates prior knowledge	Questioning	Talk
Vocabulary	Feedback	Sequenced steps to enable new learning
Modelling	Identifying and addressing misconceptions	Assessment for and of learning
Retrieval practice - long term memory	Adapted learning for the needs of individual pupils	Resources – to support, scaffold, challenge

Key Subject Teaching Approaches

- The Design and Technology and Computing curricula are linked – Electrical Systems ‘Monitoring and Control’ technology is primarily delivered through the computing curriculum planning
- The curriculum is supported and delivered through the DT Association advocated approach of ‘Projects on a Page’
- Children will design for a specific purpose and audience – after evaluating a range of existing products
- Children make prototypes, where appropriate, in order to finalise their design and make project
- Children complete the cycle by evaluating their product against the intended design criteria

EYFS

Across nursery and reception, Design and Technology knowledge and skills are explicitly taught as foundations for the KS1 National Curriculum. The focus is primarily to develop the Design and Technology knowledge within the overarching topics using these units of learning as the vehicles of delivery.

The Design Technology opportunities below are some of the key opportunities that are afforded to our children, however, as part of our continuous provision, children are designing, trialling, creating and evaluating all of the time – be it in a construction area with a range of building blocks, in the junk modelling area, at the creation station or outside with the large loose parts.

Term	Nursery- Core Knowledge	
AUT 1	Ourselves Seasonal Changes Special Times	<u>Creating with Materials</u> Know that they can use a range of loose parts to create representations (2D and 3D) of themselves, people and places that are special to them.
AUT 2		Know that if they want the loose parts to stick together they need to use glue or tape to join them.
SPR 1	Weather Homes and Houses Farm animals and their babies	<u>Creating with Materials</u> Know that they can have their own ideas and decide for themselves which materials they want to build with e.g. blocks, stickle brix, cups etc.
SPR 2		Know that they can have their own ideas and decide for themselves which materials they want to use to express their ideas e.g. textiles and techniques such as wrapping and draping. <u>Progression to N2</u> Know that they can use materials to investigate stacking, enclosing, bridging and joining.
SUM 1	Growing The Seaside and the sea	<u>Creating with Materials</u> Know how to hold whole loop hand scissors, initially using both hands to open and close the blades to snip a range of materials e.g. paper, playdough, leaves etc).
SUM 2		<u>Progression to N2</u> Knows how to use dominant hand to hold paper to cut lines straight lines moving onto curves.
<i>The children take part in regular cooking activities across the year and will know how to use some tools when cooking/preparing food showing a growing understanding of care, safety and following hygiene rules.</i>		

Term	Reception- Core Knowledge
AUT 1	<u>Our community and people who help us</u> <u>Me and you/ celebrations and beliefs</u> Technical knowledge- Structures- <i>Design, Make and evaluate</i> - Build with a range of toys and construction materials, - Constructs with a purpose in mind, using a variety of resources. • Know how to work with and use different media and 2D and 3D resources including junk modelling, construction materials and other joining materials • Know how to use junk modelling materials thinking about the shapes and materials they want to use • Know how to use a selection of joining and sticking techniques (gluing and using a hole punch) • know how to use tools carefully, such as scissors, and how to behave safely with equipment
AUT 2	
SPR 1	<u>My world, your world</u> <u>People cultures and communities</u> Cooking and Nutrition- <i>Make a fruit salad</i> - Understands need for variety in food. - Explain foods that are healthy /unhealthy Talk about why different foods are good for us • Know how to talk fruit they taste and discuss which ones they like and dislike • Know about hygiene and care during cooking activities. • know how to use a spoon and mix food with care and use other tools including knives with support safely.
SPR 2	
SUM 1	<u>Minibeasts</u> <u>Growing and aspirations</u> Technical knowledge- Textiles- <i>Design, Make and evaluate</i> - Experiments to create different textures - Understands that different media can be combined to create new effects - Select materials independently • Know how to work with different media to create different effects and talk about their choices and ideas. • Know what they would like to make and talk about what they like and dislike about their designs and creations. • Know how to use a selection of joining and sticking techniques (gluing, taping, using a hole punch, split pins)
SUM 2	

Long Term Map

	Autumn	Spring	Summer
Year 1	Technical knowledge- Mechanisms – Design and make a pop-up card Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	Textiles- Weaving Using a loom and ribbon to create a weaving pattern	Cooking and Nutrition Fruit smoothies Use the basic principles of a healthy and varied diet to prepare dishes
Year 2	Textiles Design and stitch a hand puppet	Technical knowledge- Structures Design and make bridges Build structures, exploring how they can be made stronger, stiffer and more stable	Cooking and Nutrition A healthy naan understand where food comes from.
Year 3	Technical knowledge- Structures- Design a package/food box Apply their understanding of how to strengthen, stiffen and reinforce more complex structures	Cooking and Nutrition Bake a bread bun (healthy sandwich fillings) understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.	Textiles Design and make a bag using sewing techniques
Year 4	Technical knowledge- Structures Design and make a structure using junk material	Cooking and Nutrition Make a nutritious soup prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques	Technical knowledge- Electrical systems A nightlight using recyclable materials understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
Year 5	Technical knowledge- Structures Design and make a rocket launch pad	Cooking and Nutrition Make a pizza Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques	Technical knowledge- Mechanical Systems Cams for a moving toy for children *DT association understand and use mechanical systems in their products
Year 6	Cooking and Nutrition Make a curry prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques understand and apply the principles of a healthy and varied diet	Technical Knowledge- Electrical Systems Design and create an alarm system *DT Association Apply their understanding of computing to program, monitor and control their products.	Technical knowledge- Structures Design and make a wooden bird-box/hideout
	DT Association whole school package to support with subject knowledge.		

Key Questions/End point

	Autumn	Spring	Summer
Year 1	Technical knowledge- Mechanisms I can make a pop-up card using a mechanism.	Textiles I can talk about and create a weaving pattern.	Cooking and Nutrition I can prepare and make a healthy fruit smoothie.
Year 2	Textiles I can join materials to make a hand puppet.	Technical knowledge- Structures I can build a strong and stable bridge.	Cooking and Nutrition I can prepare and make a healthy naan
Year 3	Technical knowledge- Structures I can make a strong package/ food box	Cooking and Nutrition I can bake a bread bun and make a healthy filling for a sandwich.	Textiles I can use sewing techniques to make a bag
Year 4	Technical knowledge- Structures I can design and make a structure using junk material	Cooking and Nutrition I can make a healthy and nutritious soup	Technical knowledge- Electrical systems I can create a night light using recyclable materials
Year 5	Technical knowledge- Structures I can design and make a rocket launching pad	Cooking and Nutrition I can make a pizza.	Technical knowledge- Mechanical Systems I can use Cams for a moving toy for children
Year 6	Cooking and Nutrition I can select the core ingredients and make a healthy curry.	Technical Knowledge- Electrical Systems I can design and make a working alarm system	Technical knowledge- Structures I can design and make a stable birdbox/hideout
	DT Association whole school package to support with subject knowledge.		

Key Disciplinary Knowledge – to revisit, assess and remember

	Designing	Making	Evaluating
Year 1	Generate ideas based on simple design criteria Communicate ideas through talk and drawings	Plan by deciding what to do next Select and use simple tools and utensils – explaining their choices	Evaluate how well the product works and whether it will be liked by the intended user
Year 2	Generate initial ideas and their own design criteria Use annotated sketches to communicate their ideas	Select tools and resources from a range of equipment Use finishing techniques	Evaluate their products throughout and their final product against the original design criteria
Year 3	Generate realistic ideas and design criteria focusing on the user and purpose of the product Use final product sketches and prototypes to communicate their ideas	Plan the main stages of making Select materials according to their functional and aesthetic properties	Take in to account others' views when evaluating against design criteria
Year 4	Develop ideas and design criteria through the analysis of existing products	Plan and explain the main stages of making Select and use finishing techniques suitable for the product	Evaluate their ideas and products against their design criteria – identifying strengths and weaknesses in their work
Year 5	Gather information about users' needs through research (interviews, questionnaires, surveys etc) Develop a simple design specification	Formulate step by step plans Produce detailed lists of equipment and materials	Compare final products against original design specifications, taking in to account the views of others
Year 6	Develop a design specification taking in to consideration the constraints of time, cost and resources Communicate ideas through exploded drawings and circuit diagrams	Independently select the tools and resources required Work within the constraints of time, resources and cost	Test products with the intended user to critically evaluate the quality of manufacture, functionality and fitness for purpose

End Points - Progression of Core Knowledge/Skills

What the children will know and remember to support their future learning. The knowledge to be learned is over a unit and not to be seen as individual lessons.

	Autumn	Spring	Summer
Year 1	Technical knowledge- Mechanisms Pop up cards Technical knowledge and understanding • Know how to create and use sliders and levers. • Know that different mechanisms produce different types of movement Sliders and Levers • Know that mechanisms mean moving parts working together. • Know that a slider is a rigid bar that moves forwards and backwards along a straight line. • Know that a lever is a rigid bar that moves around a pivot.	Technical knowledge- Textiles Weaving Technical knowledge and understanding • Know how textiles can be made stronger, stiffer and stable • Know how to cut materials using scissors safely • Know how to explain which tools I am using and why • Know how to join textiles together by weaving • Know their own likes and dislikes regarding the product	Cooking and Nutrition Smoothies Technical knowledge and understanding • Know where a range of fruit and vegetables come from e.g. farmed or grown at home. • Know and use basic principles of a healthy and varied diet to prepare dishes • Know and use technical and sensory vocabulary relevant to the project • Know that fruit and vegetables are a key part of a varied diet. Preparing Fruit and Vegetables • Know that things that we design and make for others are called products. • Know that to use cooking utensils safely we must: have clean hands and equipment, be careful of sharp parts and know how to use them.
Year 2	Technical knowledge- Textiles Hand puppets Technical knowledge and understanding • Know how simple 3-D textile products are made, using a template to create two identical shapes. • Know how to join fabrics using different techniques • know about and explore different finishing techniques	Technical knowledge- Structures Bridges Technical knowledge and understanding • Know how to make freestanding structures stronger, stiffer and more stable Freestanding Structures • Know that a free-standing structure is a structure that stand on its own. • Know that a 'mock-up' is a 3- D trail of a product. • Know that 'stability' in relation to a free-standing structure, is how likely it is to fall over and that we	Cooking and Nutrition Make a naan • Know that bread-based food is made from other ingredients. • Know that coriander, garlic and wheat are grown. Preparing Fruit and Vegetables • Know that things that we design and make for others are called products. • Know that to use cooking utensils safely we must: have clean hands and equipment, be careful of sharp parts and know how to use them.

	Templates and Joining Techniques • Know that a template is used to create identical shapes • Know 2 ways of joining fabric through sewing – running stitch, overstitch • Know that to ‘finish’ a product, means to colour and decorate it	can make structures more stable by making them stiffer and stronger.	• Know that fruit and vegetables are a key part of a varied diet.
Year 3	Technical knowledge- Structures Package/food box Technical knowledge and understanding • Know, develop and use knowledge of how to construct strong, stiff shell structures. • Know, develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes. • Know and use technical vocabulary relevant to the project. Structures • Know that a net is used to create a shell structure • Know that ‘scoring’ a material can make it easier to fold • Know that tabs are required to fix together a net	Cooking and Nutrition Bake a bread bun and a healthy sandwich filling A Healthy and Varied Diet • Know that we can cut safely by using the bridge or claw cutting techniques • Know that when planning and evaluating foods, we must consider taste, smell and appearance • Know that a processed foodstuff is any food that has been altered in some way during preparation. Food processing can be as basic as: heating, freezing and baking	Technical knowledge- Textiles A bag using sewing techniques Technical knowledge and understanding • Know how to strengthen, stiffen and reinforce existing fabrics. • Know how to securely join two pieces of fabric together. • Know the need for patterns and seam allowances. • Know and use technical vocabulary relevant to the project. From 2D to 3D • Know that a seam allowance is needed to make a secure join • Know that there are several different ways to ‘fasten’ fabrics: zips and buttons are the most common • Know that two common sewing techniques are the backstitch, and overstitch
Year 4	Technical knowledge- Structures Design and make a structure using junk material Technical knowledge and understanding • Know, develop and use knowledge of how to construct strong, stiff shell structures.	Cooking and Nutrition A healthy soup A Healthy and Varied Diet • Know how to select suitable techniques to cut safely (bridge or claw)	Technical knowledge- Electrical systems To make a night light using recyclable materials Technical knowledge and understanding • Know how to control products containing electrical systems, such as series circuits incorporating switches, bulbs and buzzers.

	• Know, develop and use knowledge of nets of cubes and cuboids and, where appropriate, more complex 3D shapes • Know that their design must meet a range of criteria • Know how to select suitable equipment and tools to create product accurately and safely • Know about the order of their work	• Know that when planning and evaluating foods, we must consider taste, texture, smell and appearance • Know that a processed foodstuff is any food that has been altered in some way during preparation. Food processing can be as basic as: freezing; canning; baking; drying	• Know and use technical vocabulary relevant to the project. Monitoring and Control • Know that a circuit needs a switch • Know that the two main types of electrical circuit are series and parallel circuits • Know what a simple circuit is and can add components to it • Know how to select suitable equipment and tools to create product accurately and safely
Year 5	Technical knowledge- Structures Make a rocket launching pad Technical knowledge and understanding • Know how to strengthen, stiffen and reinforce 3-D frameworks. • Know and use technical vocabulary relevant to the project. Frame Structures • Know how to measure and cut precisely • Know how to make stable and strong joins • Know how to choose the appropriate material, equipment and tools • Know a range of joining techniques	Cooking and Nutrition Make a pizza Celebrating Culture and Seasonality • Know how to use utensils and equipment including heat sources to prepare and cook food. • Know about seasonality in relation to food products and the source of different food products. • Know and use relevant technical and sensory vocabulary • Know that ingredients can be combined through mixing, kneading and rubbing. • Know that 'seasonal produce' means ingredients which are available at that point in the year • Know that organic products are those that have not been grown using pesticides	Technical knowledge- Mechanical Systems Cams for a moving toy for children *DT association understand and use mechanical systems in their products Technical knowledge and understanding • Know that mechanical systems have an input, process and an output. • Know how cams can be used to produce different types of movement and change the direction of movement. Cams • Know the associated movements of an off-centre, egg, snail and peg cam. • Know that a rotary motion goes around and round • Know that a 'follower' follows the cam, to create the movement
Year 6	Cooking and Nutrition Make a healthy Curry Celebrating Culture and Seasonality • Know how to use utensils and equipment including heat sources to prepare and cook food.	Technical Knowledge- Electrical Systems A working alarm system Technical knowledge and understanding • Know and use electrical systems in their products. • Know the use of computer control systems in products.	Technical knowledge- Structures A wooden bird-box/hide out Technical knowledge and understanding • Know how to strengthen, stiffen and reinforce 3-D frameworks.

- Know about seasonality in relation to food products and the source of different food products.
- Know that ingredients can be combined through mixing, kneading and rubbing.
- Know that 'seasonal produce' means ingredients which are available at that point in the year
- Know that organic products are those that have not been grown using pesticides

- Know and apply their understanding of computing to program, monitor and control their products.

Monitoring and Control

- Know that light dependent resistors, LDRs, or photoresistors are electronic components that are used to detect light & change the operation of a circuit dependent upon the light levels.
- Know that the two main types of electrical circuit are series and parallel circuits

- Know and use technical vocabulary relevant to the project.

Frame Structures

- Know that triangulation is key strategy to making structures stiffer and more stable
- Know that a strut is a part of a structure under compression
- Know that a frame structure is a structure made from thin components e.g. tent frame.

DT Association whole school package to support with subject knowledge.

Assessment

Children will be assessed against the above core knowledge/skills statements on a termly basis. Any gaps in knowledge will be supported in future units of learning through retrieval practice and activating prior knowledge to support future learning.

Key Vocabulary

Words in bold are the core vocabulary expectations for new arrivals.

	Autumn	Spring	Summer
EYFS	push, press, join, strong, straight, stick	cut, chop, mix, stir, safe	fold, under, over , pull, forward, backwards, pull, feed
Year 1	slider, lever, pivot , slot, bridge, masking tape, paper fastener, join, mechanism, appearance	weave, loom, thread , needle, pull, tape, textiles, stiffer, stable	smoothie, blend , flesh, skin, seed, pip, core, slice, peel, healthy diet, ingredients , utensils
Year 2	binca, needle eye, stitch , knot, join, design, decorate, finish, fabric, puppet, running-stitch, over-stitch	bridge, structure, sturdy, framework , weak, base, free-standing, mock-up	portion, recipe, knead , heat, flip, nutrition , grown, safe, combine
Year 3	construct, reinforce, improve, shell structures 3d nets, scoring, tabs	room temperature, preparation, pre-heat , canning, freezing grown, processed, reared, caught, bridge/claw techniques , varied diet (carbohydrates, fats and sugars, protein, dairy, fruits and vegetables).	fastening (clasp, zip, flap, velcro), back-stitch, blanket-stitch, over-stitch, seam allowance , names of fabrics
Year 4	marking out, shaping, adhesive , joining, accuracy, functional, fit for purpose, prototype, annotate, diagram	savoury, starchy, pulses, fibre, nutritional value , prepare, simmer , stock, broth, produce , seasoning, texture , baking, drying, preserve, seasonality	switch, battery, cell, battery holder, bulb, bulb holder, wire, buzzer, component, insulator , circuit, conductor , crocodile clip, control, series, reduce, reuse, recycle , nightlamp, shade, diffuse, fault (see components in a circuit science)
Year 5	assemble, frame structure , angle, cross-section , precise, appropriate, corrugated	gluten, allergy, intolerance, organic, pesticides , rubbing	Cam mechanism, follower, axle, rotate , oscillating motion, reciprocating motion, mechanical system, process, input/ output movement, off-centre
Year 6	spices , sundries, condiments, traditional, sauté, cuisine , crush, origins	prototype, design, specification, user, alarm, connection, types of switches, monitor, sensor program, input, output, function, series/parallel circuit, led	scale-model, triangulation , diagonal tube, rigid, section, strut , beam, bracket, gusset, temporary, permanent

Glossary

Word	Definition
adhesive	any substance that is capable of holding materials together
allergy	an abnormal immune system reaction to things — known as allergens —that are typically harmless to most people
annotate	to make or add explanatory notes
appearance	the way that someone or something looks
axle	a bar that goes through the wheels, keeping them in place and allowing them to turn
back-stitch	a strong sewing stitch made by starting the next stitch at the middle or beginning of the preceding one
blanket-stitch	a stitch used to reinforce the edge of thick materials.
blend	To mix something thoroughly.
bridge	A structure that allows people and vehicles to cross over an open space
bridge/ claw techniques	Bridge techniques- Grip both sides of food between thumb so it doesn't roll or slip when cutting Claw technique- a holding technique that keeps you fingers safe when chopping food
CAM	computer aided manufacture
caught	To catch something that tries or would try to escape
combine	to bring or join together into a whole.
component	a part or element of something
conductor	materials which allow electrical current to flow through them easily
construct	materials which allow electrical current to flow through them easily.
control	the power to make a person, organisation, or object do what you want
corrugated	the power to make a person, organization, or object do what you want:
cross stitch	a stitch in which pairs of diagonal stitches of the same length cross each other in the middle to form an X
cross-section	a cutting made across something
cuisine	a style of cooking shared by a group of people.
diagram	a drawing, image, or sketch that is used to help the reader visualise what the author is describing in the text.
fastening	a device used to attach two edges of a piece of fabric together
fit-for-purpose	Something that is fit for purpose does what it is meant to do
follower	a lever which is moved by the rotary motion of a cam.
frame-structure	a rigid support structure that gives shape and forms support for its parts.
framework	a structure that supports something built on or around it.
free-standing	Standing alone or on its own foundation free of support or attachment.

functional	serving a purpose or able to serve the intended purpose
gluten	a protein found in wheat, rye, and barley — grains that are in many everyday foods.
healthy diet	essential for good health and nutrition.
improve	to get better, or to make something better
ingredients	parts of a mixture
input/output movement	Input movement= the movement of you legs on a bike> Output movement= movement of the wheels
insulator	a material which does not easily allow heat and/or electricity to pass through it
intolerance	difficulty digesting certain foods or ingredients in food
knead	to mix by pressing, folding, and pulling.
lever	a rigid bar that moves around a pivot.
loom	a device or machine for weaving cloth.
mechanism	a system of parts working together in a machine
mock-up	a full-sized model built for study, testing, or display.
nutrition	the process of providing or obtaining the food necessary for health and growth.
nutritional values	the measure of a well-balanced ratio of the essential nutrients, carbohydrates, fat, protein, ...
off-centre	situated not quite in the centre of something
organic	the product of a farming system which avoids the use of man-made fertilisers
origins	the point or place where something begins, arises, or is derived.
over-stitch	a basic hand sewing stitch that passes vertically over two finished edges.
peel	remove the outer covering or skin from (a fruit or vegetable).
pesticides	substances we use to control or kill pests.
pivot	a shaft or pin on which something turns.
portion	to divide or to give out parts of something.
preheat	to heat something before using it
preparation	to get ready for something.
preserve	to keep (something) in its original state or in good condition
process	a series of actions that you take in order to achieve a result
processed	any food that has been altered in some way during preparation
produce	Produce is food or other things that are grown in large quantities to be sold
prototype	A prototype is the first one of your products that you make
puppet	a toy in the shape of a person or animal that you can move with strings or by putting your hand
reared	to take care of, support, and raise until maturity
recipe	a set of instructions for making something from various ingredients
recycle	the activity of processing things so that they can be used again

reduce	to lessen in any way
reinforce	to make it stronger or harder
reuse	to use again especially in a different way
rotate	to spin around an axis
running stitch	a style of sewing that uses stitches that look like a series of short lines with small spaces in between
sauté	to cook food in oil or fat overheat, usually until it is brown
scale-model	a small but exact copy
scoring	The process of making a crease in paper so it will fold easily.
seam allowance	refers to the area between the stitching line and the cut edge of the fabric.
seasonality	the times of year when foods, such as fruit and vegetables, are ripe and ready to eat.
series	a group of related things that come one after another.
shell-structure	has a thin curved outer layer and is hollow.
simmer	to stew gently below or just at the boiling point.
slice	to cut something into thin pieces, or to cut one or more thin pieces from something
slider	a bar or rod that moves forwards and backwards or side to side
smoothie	a smooth, thick drink made with puréed fresh fruit and yogurt, ice cream, or milk, or with blended vegetables.
source	to get something, especially products or materials, from a particular place
spices	spice is a part of a plant, or a powder made from that part
stable	not likely to fall
stiffer	not easily bent
stitch	use a needle and thread to join two pieces together
structure	A structure is a combination of materials and/or parts to create a 3D shape.
strut	a brace used to support a structure against pressures from the side
sturdy	strong, hard, or solid
tabs	a small loop, strap, or flap, used for pulling, hanging, or opening
textiles	any cloth or goods produced by weaving, knitting, or felting.
texture	how something feels when it is touched.
thread	a fine cord used in sewing, weaving,
triangulation	the use of triangles to strengthen and solidify structures.
weave	crossing threads over and under each other using a frame or machine