FOCUS ON <mark>STRUCTURE</mark> AND <mark>SCULPTURE</mark>											
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6				
Curriculum Statements	through making marks, and sometimes give a meaning to the marks they make. Use their imagination as they consider what they can do with different materials. Make simple models which express their ideas. 3-4 Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures. FS2 Explore, use and refine a variety of artistic effects to express their ideas and feelings. Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively, sharing ideas, resources and skills. ELG Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function Share their creations, explaining the process they have used	assembling/constructing and making, forming and modeling to explore three dimensions, form and space, and learn about the tactile properties of textures and surfaces	Design and build structures explaining how they can be made stronger, stiffer and more stable	assembling/constructing and making, forming and modelling to explore three dimensions, form and space, and learn about the tactile properties of textures and surfaces	apply their understanding of how to strengthen, stiffen and reinforce more complex structures	assembling/constructing and making, forming and modelling to explore three dimensions, form and space, and learn about the tactile properties of textures and surfaces	apply their understanding of strengthen, stiffen and reinfo more complex structures				
i D	Junk modelling / Dough	Leaf Sculpture	Windmills	Stone Age Pots	Pavillions	Clay Tiles (Inspired by Space)	Bridges				

Success

DESIGN

express them.

Consider what they can do with

different materials including boxes,

card board, card, bottle tops, lids,

Develop their own ideas and then

decide which materials to use to

Make simple models which express

their ideas including vehicles and

buildings. Join different materials

and explore different textures.

[smooth, rough, scratchy, soft,

Return to and build on their

previous learning, refining ideas

including plan, create, change, add

and developing their ability to

represent them. Use words

TECHNICAL KNOWLEDGE

Identify a building or vehicle

structure, naming the finished

Learning how to use 3D shapes to

build effective structures including

Identify moving parts of an object.

result and components used.

cube, cuboid, cone, cylinder,

structures need a solid base.

pyramid). Understanding that

hard, bumpy, fluffy]

EVALUATE

paper, string, tubes and pots.

DESIGN

- ✓ Design a sculpture that takes inspiration from nature
- Design markings and decorations which reflect patterns seen in nature.
- To plan and develop ideas to create texture using different tools

MAKE

- ✓ Change the surface of a malleable material
- ✓ Carve into media using a variety of tools
- Use techniques including pinching, rolling twisting, scratching when working with malleable material
- ✓ Build a sculpture with various elements

EVALUATE

- ✓ To be able to explain what has worked well in a finished piece
- ✓ To be able to make suggestions, with the help of an adult or peer, about what could be improved

TECHNICAL KNOWLEDGE

- ✓ To know that the shape of materials can be changed
- ✓ A sculpture is a 2D or 3D form and can be carved from wood or stone or constructed using other materials.
- ✓ Sculptures can be made from natural or man-made materials.
- ✓ Sculptures can be used to represent a range of creative ideas. They can be permanent or temporary.
- ✓ A free-standing structure needs a solid or flat base in order to be able to stand.
- ✓ Materials can be joined in a variety of ways e.g. glue, masking tape.
- To know that clay is fragile when dry and that this fragility increases the thinner the sculpture / clay becomes

DESIGN

- ✓ Learn the importance of a clear design criteria
- ✓ Use my own preferences and requirements in a design
- Designing a moving mechanism for a specific audience in accordance with a design criterion

MAKE

- Make a stable structure from card, tape and glue
- Learn how to turn 2D nets into 3D structures
- Follow instructions to cut and assemble a supporting structure
- Make functioning turbines and axles which are assembled into a main supporting structure components neatly

EVALUATE

- ✓ Evaluate own designs against design criteria
- ✓ Use peer feedback to modify a final design

TECHNICAL KNOWLEDGE

- ✓ To know that the shape of materials can be changed to improve the strength and stiffness of structures
- To know that cylinders are a strong type of structure (e.g. the main shape used for windmills and lighthouses)
- windmills and lighthouses)

 ✓ To know that axles are used in structures and mechanisms to make parts turn in a circle
- ✓ To begin to know that different structures are used for different purposes
- ✓ To know that a structure is something that has been made and put together

Additional

- ✓ To know that a client is the person I am designing for
- To know that design criteria is a list of points to ensure the product meets the client's needs and wants
- To know that a windmill harnesses the power of wind for a purpose like grinding grain, pumping water or generating electricity
- To know that windmill turbines use wind to turn and make the machines inside work
- To know that a windmill is a structure with sails that are moved by the wind

DESIGN

- Design a pot that takes inspiration from Stone Age pottery
- Design markings and decorations which reflect what is known about stone age pots.
- ✓ To plan and develop ideas, using different joining techniques and methods of construction

MAKE

- ✓ Make a thumb pot
- ✓ Make a coil pot
- Make a pot of choice which reflects pots from the Stone Age
- ✓ To join clay adequately
- ✓ To create surface patterns and textures in a malleable material

EVALUATE

- ✓ Evaluate own designs against design criteria
- Use peer feedback to explain what could have been improved

TECHNICAL KNOWLEDGE SEE YEAR 1

- ✓ Water makes clay softer and easier to mould, but that too much can make it unworkable.
- Clay can crack when it dries if it is too thin
- Know that a pinch pot is made by simply pinching the clay between the thumbs and fingers to form the shape of a pot
- A coil pot is made by stacking up coils of clay (Coil is a rope shaped length of clay)
- Pots are a type of container and that containers are hollow inside (criteria for own work)
- Pots have been used throughout history, by different civilisations and different types of pots were decorated according to their purpose and the era (eg Stone Age)
- Clay is a natural material and has been used to produce pots because of its malleable nature
- ✓ Materials can be man-made or natural and have different associated qualities*
- The choice of a material affects what the product will look like and its use

DESIGN

- ✓ Design a stable structure that is aesthetically pleasing
- Develop design criteria from a design brief]
- Generate ideas using thumbnail sketches and exploded diagrams

MAKE

- Make a variety of freestanding frame structures of different shapes and sizes
- Select appropriate materials to build a strong structure and for the cladding
- ✓ Reinforce corners to strengthen a structure
- Learn to create different textural effects with materials
- Selecting materials due to their functional and aesthetic characteristics
- Manipulating materials to create different effects by cutting, creasing, folding, weaving

EVALUATION

- ✓ Evaluate structures made by the class
- Describe what characteristics of a design and construction made it the most effective
- Use the views of others to improve designs
- Test and modify the outcome, suggesting improvements
 Understand the purpose of exploded-diagrams

TECHNICAL KNOWLEDGE

- To know what a frame structure is
- To know that a 'free-standing' structure is one which can stand on its own

Additional

- ✓ To know that a pavilion is a decorative building or structure for leisure activities
- To know that cladding can be applied to structures for different effects.
- ✓ To know that aesthetics is how a product looks
- ✓ To know that a product's function means its purpose
- To know that the target audience means the person or group of people a product is designed for
- To know that architects consider light, shadow and patterns when designing

DESIGN

- ✓ To plan a sculpture through drawing and other preparatory work
- To plan a sculpture that will be freestanding and where all elements will be securely joined

MAKE

- To produce intricate patterns and textures in a malleable material
- ✓ To develop skills in using clay including slabs, coils, slips etc
- ✓ To shape, form, model and construct from observation or imagination
- ✓ To use recycled, natura and man made materials to create sculpture

EVALUATION

- To recognise the properties of different materials
- To evaluate the impact of the various materials within their sculpture
- To discuss and evaluate their own work recognising both aesthetic and functional strength and areas for improvement

TECHNICAL KNOWLEDGE SEE YEAR 1 and YEAR 3

- Ceramics is the art of making objects out of clay to produce pottery and sculpture
- Wedging is kneading the clay with hands to force out air pockets creating a uniform texture
- Slab building is a hand building technique using rolling pins to roll out sheets of clay, These can be used to form patterns and assemble into forms.
- Score and slip is a joining technique where the edges to be attached are 'roughened up' and "glued" with liquid clay (slip)
- Slip is watered down clay which becomes soft and slippery

DESIGN

- Design a stable structure that can support weight
- Creating frame structure with focus on triangulation

MAKE

- ✓ Make a range of different shaped beam bridges
- ✓ Using triangles to create truss bridges that span a given distance and supports a load
- ✓ Building a wooden bridge structure
- ✓ Independently measuring and marking wood accurately Selecting appropriate tools and equipment for particular tasks
- ✓ Using the correct techniques to saws safely
- Identifying where a structure needs reinforcement and using card corners for support

EVALUATION

Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary Suggesting points for improvements for own bridges and those designed by others

TECHNICAL KNOWLEDGE

- Exploring how to create a strong beam
- Identifying arch and beam bridges and understanding the terms: compression and tension
- ✓ Identifying stronger and weaker structures
- Finding different ways to reinforce structures
 Understanding how triangles can be used to reinforce bridges
- Articulating the difference between beam, arch, truss and suspension bridges

		✓ To know the three main parts	✓ A sculpture is usually a 3D art		
		of a windmill are the turbine,	form.		
		axle and structure			
		✓ To know that mechanisms are			
		a collection of moving parts			
		that work together as a			
		machine to produce			
		movement			
		\checkmark			!