Termly Progression Document

Design and Technology – Cycle A			
Subject	**Key vocab.**	**Declarative knowledge**	**Procedural knowledge**
Early Years	Early Years Objectives (taken from the Early Years Foundation Stage Statutory Framework and the Development Matters guidance) are covered throughout the year for ages 2 Years Old to the end of Reception. Please refer to the following documents to view the half termly progression of declarative and procedural knowledge: - Nursery Skills Development Progression 2 to 3 year olds. - Nursery Skills Development Progression 3 to 4 year olds. - Reception Long Term Plan. - Early Years Subject Lead Document. The progression of subject specific Early Years objectives can be found on each subject's Substantive Knowledge Progression Document.		
Autumn 2 (A) Phase: Y1/2	tools saw safely tearing curling	<u>Hidden Habitats - Constructing a Bug Hotel</u> • I know how to keep myself and others safe when using equipment and tools.	<u>Hidden Habitats - Constructing a Bug Hotel</u> • I can explore existing products. • I can safely demonstrate a range of cutting and shaping techniques such as tearing, cutting, folding and curling. • I can measure and mark out to the nearest centimetre. • I can use a saw and a bench hook with the support of an adult to cut safely.
Spring 2 (A) Phase: Y1/2	fabric running stitch needle thread	<u>Save the Rainforests – Making a Toy Animal</u> • I know how to keep myself and others safe when using equipment and tools.	<u>Save the Rainforests – Making a Toy Animal</u> • I can cut material to within a centimetre of the edge of a template. • I can join textiles using running stitch. • I can communicate my design through drawing my ideas.
Summer 1 (A) Phase: Y1/2	grate scales recipe sauté	<u>Take me to Italy – Cook a Pasta Sauce</u> • I know how to keep myself and others safe when using equipment and tools.	<u>Take me to Italy – Cook a Pasta Sauce</u> • I can cut, peel or grate ingredients safely and hygienically. • I can measure or weigh using measuring cups or electronic scales. • I can use a saucepan to sauté ingredients. • I can taste ingredients to identify likes and dislikes and use this to influence my own recipe. • I can follow instructions with the help of an adult to create a simple recipe.
Autumn 2 (A) Phase: Y3/4	scalpel cross-sectional diagrams conical net slit and tab	<u>Up in Smoke – Constructing an Erupting Volcano</u> • I know how to use a safety scalpel to cut a slit.	<u>Up in Smoke – Constructing an Erupting Volcano</u> • I can produce annotated sketches and cross-sectional diagrams to plan my design. • I can cut along a line accurately and neatly. • I can create a conical net. • I can use a slit and tab to join without glue. • I can evaluate the success of my model and explain how it could be improved.
Spring 2 (A) Phase: Y3/4	cross sectional diagram electrical circuit bench hook intended user	<u>Our City – Making an Anderson Shelter</u> • I know that I must design with my intended user in mind. I know that the triangular shape is used within structures for strength.	<u>Our City – Making an Anderson Shelter</u> • I can produce annotated sketches and cross-sectional diagrams to plan my design. • I can apply my knowledge of electrical circuits to add a light to my design. • I know how the inventions of Thomas Edison have helped to shape the world. • I can measure and mark out to the nearest half centimetre. • I can use a saw and a bench hook to cut wood safely.
Summer 1 (A) Phase: Y3/4	consumer grams simmer	<u>Chocolate – Is it Worth it? – Make a Chocolate Product</u> • I know how to heat ingredients safely.	<u>Chocolate – Is it Worth it? – Make a Chocolate Product</u> • I can create a prototype with an intended consumer in mind. • I can use analogue scales to weigh and measure accurately to the nearest 25 or 250 grams. • I can follow instructions to create a recipe. • I can gather feedback about my product to evaluate it. • I can use a saucepan to simmer water safely when melting chocolate.
Autumn 2 (A) Phase: Y5/6	structure mitre block withstand	<u>Disaster! Designing an Earthquake Proof Structure</u> • I know that triangles are used in structures for strength. • I know that Robert Stephenson was a key individual who designed bridges.	<u>Disaster! Designing an Earthquake Proof Structure</u> • I can use a saw and mitre block to safely cut wood to size. • I can test my product to check that it would withstand an earthquake. I can use this test to influence future designs. • I can measure and mark out to the nearest millimetre. • I can use a protractor to measure and mark out 45, 60 and 90 degree angles.
Spring 2 (A) Phase: Y5/6	electrical system buzzer net exploded diagram	<u>Our Changing World – Designing an Eco House</u> • I know how to use electrical systems to add lighting and a doorbell to my building.	<u>Our Changing World – Designing an Eco House</u> • I can communicate my ideas by creating annotated sketches and exploded diagrams. • I can use electrical circuits to add lightbulbs and a buzzer to my building. • I can consider the views of others to improve my work. • I can measure and mark out to the nearest millimetre. • I can use a protractor to measure and mark out 45, 60 and 90 degree angles. • I can use a series of nets.
Summer 1 (A) Phase: Y5/6	crystalise dissolve intended consumer intervals	<u>Great Southcoates Bake Off – Make your own Hull Fair Brandy Snap</u> • I know how to heat ingredients safely.	<u>Great Southcoates Bake Off – Make your own Hull Fair Brandy Snap</u> • I can use analogue scales to weigh and measure accurately to the nearest gram, reading scales that increase in various intervals. • I can plan ahead before following a recipe to gather together everything I need. • I can gather feedback about my product to evaluate it. • I can use a saucepan when dissolving butter and sugar, ensuring that the mixture doesn't crystalise.

Termly Progression Document

Design and Technology – Cycle B			
Subject	**Key vocab.**	**Declarative knowledge**	**Procedural knowledge**
Early Years	Early Years Objectives (taken from the Early Years Foundation Stage Statutory Framework and the Development Matters guidance) are covered throughout the year for ages 2 Years Old to the end of Reception. Please refer to the following documents to view the half termly progression of declarative and procedural knowledge: - Nursery Skills Development Progression 2 to 3 year olds. - Nursery Skills Development Progression 3 to 4 year olds. - Reception Long Term Plan. - Early Years Subject Lead Document. The progression of subject specific Early Years objectives can be found on each subject's Substantive Knowledge Progression Document.		
Autumn 2 (B) Phase: Y1/2	safely tearing curling slider moving part	<u>Penguin Parade - Making a Card With Moving Parts</u> • I know how to keep myself and others safe when using equipment and tools.	<u>Penguin Parade - Making a Card With Moving Parts</u> • I can explore existing products. • I can measure and mark out to the nearest centimetre. • I can safely demonstrate a range of cutting and shaping techniques such as tearing, cutting, folding and curling. • I can make a simple mechanism such as a slider.
Spring 1 (B) Phase: Y1/2	fabric running stitch needle thread	<u>Magical Memories - Creating a Patchwork Quilt</u> • I know how to keep myself and others safe when using equipment and tools.	<u>Magical Memories - Creating a Patchwork Quilt</u> • I can cut material to within a centimetre of the edge of a template. • I can communicate my design through drawing my ideas. • I can join textiles using running stitch.
Summer 2 (B) Phase: Y1/2	grate scales recipe sauté	<u>Predators – Making a Predator Pizza</u> • I know how to keep myself and others safe when using equipment and tools.	<u>Predators – Making a Predator Pizza</u> • I can cut, peel or grate ingredients safely and hygienically. • I can taste ingredients to identify likes and dislikes and use this to influence my own recipe. • I can follow instructions with the help of an adult to create a simple recipe. • I can express my likes and dislikes about my cooking. • I can use a saucepan safely to sauté ingredients.
Autumn 2 (B) Phase: Y3/4	pulley mechanism	<u>Searching for Jellyfish – Creating a Ship Crane</u> • I know that Archimedes influenced the development of early pulley systems. • I know how to use pulleys and cams to create a moving part.	<u>Searching for Jellyfish – Creating a Ship Crane</u> • I can identify the mechanisms in existing products. • I can use a pulley system to create a moving part.
Spring 1 (B) Phase: Y3/4	right sides together backstitch eye	<u>The Romans – Creating a Roman Purse</u> • I know how to use right sides together to hide stitching to create a smooth finish.	<u>The Romans – Creating a Roman Purse</u> • I can design and create a sewing pattern template. • I can thread a needle with a large eye and a needle threader. • I can use the backstitch to join my fabric. • I can cut material to within half a centimetre of the edge of a template.
Summer 2 (B) Phase: Y3/4	cross sectional diagram levers linkages	<u>Deadly 60 – Making a Snapping Crocodile</u> • I know the difference between levers and linkages.	<u>Deadly 60 – Making a Snapping Crocodile</u> • I can produce annotated sketches and cross-sectional diagrams to plan my design. • I can identify the mechanisms in existing products. • I can use mechanical systems such as levers and linkages to make a product with moving parts.
Autumn 2 (B) Phase: Y5/6	gears pulleys cams motor electrical system	<u>The Journey – Creating a Cam Toy</u> • I know the difference between pulleys and cams. • I know the difference between mechanical and electrical systems.	<u>The Journey – Creating a Cam Toy</u> • I can communicate my ideas by creating annotated sketches and exploded diagrams. • I can consider the views of others to improve my work. • I can use a mechanical system to make a product that moves.
Spring 1 (B) Phase: Y5/6	blanket stitch stiffen professional sewing pattern	<u>Shakespeare - Creating an Elizabethan Costume Accessory</u> • I know how to use layers to stiffen fabric. • I know how to tie a knot at the end of my thread.	<u>Shakespeare – Creating an Elizabethan Costume Accessory</u> • I can cut materials with precision. • I can create my own Elizabethan costume accessory, using a blanket stitch to create a finished edge. • I can consider how to create a professional looking finish. • I can design and create a sewing pattern template.
Summer (B) Phase: Y5/6	exploded diagram structure mitre block	<u>Running Wild - Creating a Shelter</u> • I know that I must take into account the views of my intended user when designing my prototype. • I know that the triangles are used in structures for strength.	<u>Running Wild - Creating a Shelter</u> • I can communicate my ideas by creating annotated sketches and exploded diagrams. • I can measure and mark out to the nearest millimetre. • I can use a protractor to measure and mark out 45, 60 and 90 degree angles. • I can use a saw and mitre block to safely cut wood to size.