

St. Paul's Catholic Primary School D&T– Cycle B Progression of skills and knowledge through Key Stages 1 & 2

| Yr | | Autumn | | | | Spring | | | | Summer | | | |
|------|--|--|---|---|------------------------|--|---|--|-------------------|----------------------------|---|---|--|
| | Project | Skills | Knowledge | Materials/ Tools | Project | Skills | Knowledge | Materials / Tools | Project | Skills | Knowledge | Materials / Tools | |
| 1& 2 | Pirate Paddy's Packed Lunch Problem s | Design Make Evalua te Tech- nical Know- ledge | Use their knowledge of existing products and their own experience to help generate their ideas; Design products that have a purpose and are aimed at an | Double sided tape, masking tape, sticky tape, sticky pads PVA glue and glue sticks String, treasury tags, split pins, paper clips Scissors, hole punch Cardboard/pap er, foil, clingfilm | Dips and Dippers | Design Make Evaluat e Cook- ing & | Design products that have a purpose and are aimed at an intended user; Explain how their products will look and work through talking and simple annotated drawings; | ingredien ts such as beetroot, pepper, grated carrot, tomatoes Chopping boards, bowls, graters, safe knives, food scissors, teaspoon s and tablespo | Fabric Bunting | Design Make Evaluate | design models using simple computing software; e plan and test ideas using templates and mock- ups; work in a range of relevant contexts; select from a range of materials, textiles and | Embroide ry needles, Threads, Scissors, Selection of different fabrics such as hessian, fur, binca, leather, cotton. | |



| intended | Understand ons | components |
|--------------|----------------|---------------|
| user; | and follow | according to |
| Understan | simple | their |
| d and | design | characteristi |
| follow | criteria; | cs; |
| simple | Work in a | Use hand |
| design | range of | tools safely |
| criteria; | relevant | and |
| Work in a | contexts | appropriatel |
| range of | Follow a | у; |
| relevant | simple | Cut, shape |
| contexts. | recipe; | and score |
| | Select from a | materials |
| Begin to | range of | with some |
| select from | equipment, | accuracy; |
| a range of | Select from a | Demonstrat |
| hand tools | range of | e how to |
| and | materials | cut, shape |
| equipment; | and | and join |
| Select from | components | fabric to |
| a range of | according to | make a |
| materials, | their | simple |
| textiles and | characteristi | product; |
| component | CS; | manipulate |



| s according | Use kitchen | fabrics in |
|-------------|---------------|---------------------------|
| to their | equipment | simple ways |
| characteris | safely and | to create the |
| tics; | appropriatel | desired |
| Learn to | y and learn | effect; |
| use hand | to follow | Explore and |
| tools and | hygiene | evaluate |
| safely and | procedures; | existing |
| appropriat | Use a range | products |
| ely; | of food | mainly |
| Assemble, | ingredients; | through |
| join and | Combine | discussions, |
| combine | ingredients; | comparisons |
| materials, | Cut, peel and | and simple |
| component | grate | written |
| s; | ingredients, | evaluations; |
| Use simple | including | <mark>Explain</mark> |
| finishing | measuring | positives and |
| techniques | and weighing | things to |
| to improve | ingredients | <mark>improve for</mark> |
| the | using | existing |
| appearanc | measuring | <mark>products;</mark> |
| e of their | cups; | talk about |
| | | <mark>their design</mark> |



D&T– Cycle B

| product,; | Explore and | ideas and |
|------------------------|---------------------------|---|
| | evaluate | what they |
| Explore | existing | are making; |
| and | products | Identify |
| evaluate | mainly | strengths |
| existing | through | and possible |
| products | discussions, | changes |
| mainly | comparisons | they might |
| through | and simple | make to |
| discussions | written | refine their |
| <mark>,</mark> | evaluations; | existing |
| <mark>compariso</mark> | Explain | <mark>design;</mark> |
| ns and | positives and | <mark>Evaluate</mark> |
| simple | things to | their and the second |
| written | improve for | products |
| evaluations | existing | and ideas |
| <mark>;</mark> | products; | <mark>against their</mark> |
| Explain | Talk about | simple |
| positives | <mark>their design</mark> | <mark>design</mark> |
| and things | <mark>ideas and</mark> | <mark>criteria;</mark> |
| to improve | what they | |
| for existing | are making; | |
| <mark>products;</mark> | <mark>ldentify</mark> | |
| Explore Explore | strengths | |



D&T– Cycle B

| what | and possible |
|---|---|
| materials | changes they |
| products | might make |
| are made | to refine |
| from; | their existing |
| Identify | design; |
| | |
| strengths | Evaluate the size |
| and | their line line line line line line line line |
| possible | products and |
| changes | <mark>ideas against</mark> |
| they might | their simple |
| <mark>make to</mark> | design |
| <mark>refine their</mark> | <mark>criteria;</mark> |
| existing | <mark>E</mark> xplain |
| design; | where in the |
| Evaluate | world |
| their a second | different |
| products | foods |
| and ideas | originate |
| against | from; |
| their | Name and |
| simple | sort foods |
| design | into the five |
| | groups in the |



D&T– Cycle B

| S; |
|----|
|----|



D&T– Cycle B

| 3& | Battery | Design | Design | Foil | The | Design | Use | Salt | Let's Go Fly | Design | Identify the | Construct |
|----|-------------------------|--|---|--|-------------------------------|--|---|--|--------------|--|---|---|
| 4 | Operat- ed Lights | Make Evalua te Tech- nical Know- ledge | innovative and appealing products that have a clear purpose. Use annotated sketches and cross- sectional drawings to develop and communica | Coins Wires Bulbs split pins paper clips plastic cardboard pegs ball bearings bulbs bulb holders batteries battery holders wires Wire cutters | Great Bread Bake Off | Make Evaluat e Cook- ing & Nutrit- ion | annotated sketches and cross- sectional drawings to develop and commun- icate their ideas. Explore different initial ideas before coming up with a final design. | dough Sample products Ingred- ients for bread making | a Kite | Make Evaluate Tech- nical Know- ledge | desting the design features of their products that will appeal to intended customers. Use their knowledge of a broad range of existing products to help generate their ideas. | ion Kits Art straws Dowel Plastic straws Junior hacksaws Bench hooks Sand paper Plastic tubing Flagging tape |



| ideas. | screwdrivers | follow | annotated |
|-----------------------|--------------|--------------|---------------|
| Select and | | simple | sketches and |
| explain | | design | cross- |
| approp- | | criteria. | sectional |
| riate | | Work in a | drawings to |
| tools/mat- | | broader | develop and |
| erials. | | range of | commun- |
| Use a | | relevant | icate their |
| range of | | contexts. | ideas. |
| tools/ | | Select and | Develop and |
| materials | | explain | follow simple |
| safely (inc. | | appropriate | design |
| hygiene). | | tools/mat- | criteria. |
| Assemble, | | erials. | Select and |
| join and | | Use a range | explain |
| combine | | of tools/ | appropriate |
| material | | materials | tools/mat- |
| and | | safely (inc. | erials. |
| compon- | | hygiene). | Use a range |
| ents with | | Cut, shape | of tools/ |
| some | | and score | materials |
| degree of | | materials | safely (inc. |
| accuracy. | | with some | hygiene). |
| <mark>Evaluate</mark> | | degree of | Measure and |



| their and the second | accuracy. | mark out to |
|---|----------------------------|---------------------------|
| product | Explore and | the nearest |
| against | evaluate | cm and |
| their a second se | existing | millimetre. |
| original | products. | Cut, shape |
| design | Explore what | and score |
| <mark>criteria</mark> . | materials/ing | materials |
| <mark>Evaluate</mark> | redients | with some |
| <mark>the key</mark> | products are | degree of |
| events, | made from | accuracy. |
| including | and suggest | Assemble, |
| <mark>technologic</mark> | <mark>reasons for</mark> | join and |
| al develop- | this | combine |
| <mark>ments, and</mark> | Consider | material and |
| designs of | <mark>their design</mark> | components |
| <mark>individuals</mark> | <mark>criteria as</mark> | with some |
| <mark>in design</mark> | they make | degree of |
| and | progress and | accuracy. |
| <mark>technology</mark> | are willing to | Explore and |
| <mark>that have</mark> | alter their | <mark>evaluate</mark> |
| <mark>helped</mark> | <mark>plans.</mark> | existing |
| <mark>shape the</mark> | <mark>Evaluate</mark> | products. |
| world. | <mark>their product</mark> | <mark>Explore what</mark> |
| Under- | against their | materials/ing |



| stand that | original | redients |
|------------|---------------|-----------------------|
| materials | design | products are |
| have both | criteria. | made from |
| functional | Understand | and suggest |
| properties | how to | reasons for |
| and | prepare and | this. |
| aesthetic | cook dishes | Consider |
| qualities. | safely and | their design |
| Make and | hygienically. | criteria as |
| represent | Use a range | they make |
| simple | of | progress and |
| electrical | techniques | are willing to |
| circuits, | such as | alter their |
| such as a | mashing, | plans. |
| series and | whisking, | <mark>Evaluate</mark> |
| parallel, | crushing, | their product |
| and | grating, | against their |
| compon- | cutting, | original |
| ents to | kneading | design |
| create | and baking. | criteria. |
| functional | Measure and | Understand |
| products. | weigh | that |
| | ingredients | materials |
| | to the | have both |



| | | | nearest gram and millilitre. Start to independ- ently follow a recipe. | | functional properties and aesthetic qualities. Apply their understand- ing of how to strengthen, stiffen and reinforce more complex structures in order to create more useful character- istics of | |
|--|--|--|---|--|---|--|
| | | | | | | |



St. Paul's Catholic Primary School D&T– Cycle B Progression of skills and knowledge through Key Stages 1 & 2

| 5& | Automa | Design | Use | Card | Marbu- | Make | Independent | Card- | Global | Make | Learn to use | Fork |
|----|---------|---------------------------|----------------|-----------------------|---------|----------------------|--------------------------|-----------------|--------|-----------------------|------------------|----------------------|
| 6 | ta | Make | research to | Plasticine | lous | <mark>Evaluat</mark> | ly plan by | board | Food | <mark>Evaluate</mark> | a range of | safe knife |
| | Animals | <mark>Evalua</mark> | inform and | Double sided | Structu | e Turki | suggesting | tubes | | Cooking | tools and | chopping |
| | | <mark>te</mark> Taskai | develop | tape Constluctored | res | Technic | what to do | PVA glue | | and | equipment | boards hitch an |
| | | Techni | detailed | Cardboard | | -al | next. | masking | | Nutrition | safely and | kitchen |
| | | cal | design | boxes | | know- | With | tape | | | appropriate- | scissors |
| | | knowl | criteria to | Dowel | | ledge | growing | glue | | | ly and learn | bowls |
| | | edge | inform the | Glue gun | | | confidence, | sticks | | | to follow | spoons |
| | | | design. | Junior hacksaw | | | select from a | adhesive | | | hygiene | grater fish slice |
| | | | Explain how | | | | wide range of tools and | tape double- | | | procedure. | |
| | | | particular | | | | | sided | | | Know, | frying pan |
| | | | parts of | | | | equipment, explaining | tape | | | explain and give | |
| | | | their | | | | their | Scissors | | | examples of | |
| | | | products | | | | choices. | craft | | | food that is | |
| | | | work. | | | | Select from a | knives | | | grown in the | |
| | | | Use | | | | range of | KIIVCJ | | | UK, Europe | |
| | | | annotated | | | | materials | | | | and the | |



| sketches, | and | wider world. |
|-------------|--------------|---------------|
| cross- | components | Understand |
| sectional | according to | about |
| drawings | their | seasonality. |
| and | functional | Demon- |
| exploded | properties | strate how |
| diagrams | and | to prepare |
| Work in a | aesthetic | and cook a |
| broad | qualities. | variety of |
| range of | Learn to use | predominant |
| relevant | a range of | -ly savoury |
| contexts. | tools and | dishes safely |
| Independ- | equipment | and |
| ently plan | safely and | hygienically. |
| by | approp- | Demon- |
| suggesting | riately and | strate how |
| what to do | learn to | to use a |
| next. | follow | range of |
| With | hygiene | cooking |
| growing | procedure. | techniques, |
| confidence, | Independ- | such as |
| select from | ently take | griddling, |
| a wide | exact | grilling, |
| range of | measure- | frying and |



| tools and | ments and | boiling. |
|-------------|---------------|--------------|
| equipment, | mark out, to | Explain that |
| explaining | within 1 | foods |
| their | millimetre. | |
| | | contain |
| choices. | Use a full | different |
| Select from | range of | substances, |
| a range of | materials | such as |
| materials | and | protein. |
| and | components, | Measure |
| compon- | including | accurately |
| ents | construction | and |
| according | materials | calculate |
| to their | and kits, | ratios of |
| functional | textiles, and | ingredients |
| properties | mechanical | to scale up |
| and | components. | or down |
| aesthetic | Assemble, | from a |
| qualities. | join and | recipe |
| Learn to | combine | Independent |
| use a range | materials | -ly follow a |
| of tools | and compon- | recipe. |
| and | ents with | |
| equipment | accuracy. | |
| safely and | Complete | |



D&T– Cycle B

| appropriat | detailed |
|-------------|-------------------------|
| ely and | <mark>competitor</mark> |
| learn to | analysis of |
| follow | other |
| hygiene | products on |
| procedure. | the market. |
| Independ- | Critically |
| ently take | evaluate the |
| exact | quality of |
| measure- | design, |
| ments and | manufact- |
| mark out, | ure and |
| to within 1 | fitness for |
| millimetre. | purpose of |
| Use a full | products as |
| range of | they design |
| materials | and make. |
| and | Evaluate Evaluate |
| compon- | their ideas |
| ents, | and products |
| including | against the |
| construct- | original |
| ion | design |
| materials | criteria, |



D&T– Cycle B

| and kits, | making |
|--------------|-------------------------|
| textiles, | <mark>changes as</mark> |
| and | needed. |
| mechanical | Apply their |
| compon- | understand- |
| ents. | ing of how to |
| Assemble, | strengthen, |
| join and | stiffen and |
| combine | reinforce |
| materials | more |
| and | complex |
| compon- | structures in |
| ents with | order to |
| accuracy. | create more |
| Refine the | useful |
| finish using | character- |
| techniques | istics of |
| to improve | products. |
| the | |
| appear- | |
| ance of | |
| their | |
| product. | |
| Critically | |



D&T– Cycle B

| | <mark>evaluate</mark> | | | | | |
|--|--------------------------|--|--|--|--|--|
| | <mark>the quality</mark> | | | | | |
| | <mark>of design,</mark> | | | | | |
| | <mark>manufact-</mark> | | | | | |
| | <mark>ure and</mark> | | | | | |
| | <mark>fitness for</mark> | | | | | |
| | <mark>purpose of</mark> | | | | | |
| | <mark>products as</mark> | | | | | |
| | <mark>they design</mark> | | | | | |
| | <mark>and make.</mark> | | | | | |
| | <mark>Evaluate</mark> | | | | | |
| | <mark>their ideas</mark> | | | | | |
| | and | | | | | |
| | <mark>products</mark> | | | | | |
| | <mark>against the</mark> | | | | | |
| | <mark>original</mark> | | | | | |
| | <mark>design</mark> | | | | | |
| | <mark>criteria,</mark> | | | | | |
| | making | | | | | |
| | <mark>changes as</mark> | | | | | |
| | <mark>needed.</mark> | | | | | |
| | Explain | | | | | |
| | how | | | | | |
| | mechanical | | | | | |



D&T– Cycle B

| systems, such as cams, create movement and use mechanical systems in their | | | | | |
|--|--|--|--|--|--|
| products. | | | | | |