

# The Good Shepherd Catholic Primary School



*Following Jesus,  
The Good Shepherd,  
in all we say and do*

## **Design & Technology Long Term Plan**



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CUSP Design & Technology Long term sequence	Block A	Block B	Block C	Block D	Block E	Block F
Year 1	Mechanisms	Structures	Food and Nutrition	Understanding Materials	Textiles	Food and Nutrition
Year 2	Textiles	Food and Nutrition	Mechanisms	Understanding Materials	Food and Nutrition	Structures
Year 3	Textiles	Food and Nutrition	Mechanisms	Food and Nutrition	Systems	Structures
Year 4	Food and Nutrition	Mechanisms	Textiles	Structures	Electrical Systems	Food and Nutrition
Year 5	Food and Nutrition	Systems	Textiles	Food and Nutrition	Structures	Mechanisms
Year 6	Food and Nutrition	Mechanisms	Food and Nutrition	Structures	Electrical Systems	Textiles



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### Block A and Block B (Autumn Term)

Year	Block A	Block B
1	<p><b>Core discipline:</b> Mechanisms</p> <p><b>Key concept:</b> Sliders and levers</p> <p>How can you make a picture move?</p>	<p><b>Core discipline:</b> Structures</p> <p><b>Key concept:</b> Freestanding structures</p> <p>How can you stop a tower from toppling over?</p>
2	<p><b>Core discipline:</b> Textiles</p> <p><b>Key concept:</b> Exploring shape using a template</p> <p>How can you repurpose an item of clothing?</p>	<p><b>Core discipline:</b> Food and Nutrition</p> <p><b>Key concept:</b> Nutrients and the body</p> <p>What does healthy mean?</p>
3	<p><b>Core discipline:</b> Textiles</p> <p><b>Key concept:</b> Stiffening and strengthening fabric</p> <p>How can you make a box out of cloth?</p>	<p><b>Core discipline:</b> Food and Nutrition</p> <p><b>Key concept:</b> Individual diets</p> <p>What do we mean by a balanced diet?</p>
4	<p><b>Core discipline:</b> Food and Nutrition</p> <p><b>Key concept:</b> Ultra-processed food</p> <p>What's really in your food?</p>	<p><b>Core discipline:</b> Mechanisms</p> <p><b>Key concept:</b> Hinges</p> <p>How many ways are there to open a door?</p>
5	<p><b>Core discipline:</b> Food and Nutrition</p> <p><b>Key concept:</b> Food choices</p> <p>Why are our diets so different?</p>	<p><b>Core discipline:</b> Systems</p> <p><b>Key concept:</b> Using technology to design and control</p> <p>How can we keep ourselves safe on the road?</p>
6	<p><b>Core discipline:</b> Food and Nutrition</p> <p><b>Key concept:</b> Multicultural influences on food</p> <p>Can street foods save us?</p>	<p><b>Core discipline:</b> Mechanisms</p> <p><b>Key concept:</b> Pulleys and gears - rotary and linear movement</p> <p>How do pulleys and gears let you see the world?</p>



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




### Block C and Block D (Spring Term)

Year	Block C	Block D
1	<p><b>Core discipline:</b> Food and Nutrition</p> <p><b>Key concept:</b> Exploring food senses How does food affect your senses? CUSP link: Animals, including humans</p> 	<p><b>Core discipline:</b> Understanding Materials</p> <p><b>Key concept:</b> Selecting materials Can you build with bread? CUSP link: Everyday materials</p> 
2	<p><b>Core discipline:</b> Mechanisms</p> <p><b>Key concept:</b> Axles and wheels Are bigger wheels always better?</p> 	<p><b>Core discipline:</b> Understanding Materials</p> <p><b>Key concept:</b> Manipulating materials How can you waterproof a hat? CUSP link: Uses of everyday materials</p> 
3	<p><b>Core discipline:</b> Mechanisms</p> <p><b>Key concept:</b> Levers and linkages - mechanical advantage How can you do a lot of work with little effort? CUSP link: Forces and magnets</p> 	<p><b>Core discipline:</b> Food and Nutrition</p> <p><b>Key concept:</b> Food as medicine How does food affect your body and mind? CUSP link: Animals, including humans</p> 
4	<p><b>Core discipline:</b> Textiles</p> <p><b>Key concept:</b> Fixings and fastenings How do you keep a tea towel from slipping off a hook?</p> 	<p><b>Core discipline:</b> Structures</p> <p><b>Key concept:</b> Designing structures using a frame to make them stronger and sturdier Which shapes will give a structure stability?</p> 
5	<p><b>Core discipline:</b> Textiles</p> <p><b>Key concept:</b> Durability of fabric Which fabric is ideal for creating a functional and hardwearing lunch bag?</p> 	<p><b>Core discipline:</b> Food and Nutrition</p> <p><b>Key concept:</b> Cultural influences on diet What can you learn from different cultures' diets? CUSP link: World countries</p> 
6	<p><b>Core discipline:</b> Food and Nutrition</p> <p><b>Key concept:</b> Food and mood Does food affect the way you feel?</p> 	<p><b>Core discipline:</b> Structures</p> <p><b>Key concept:</b> Designing structures revisited - combining skills and knowledge How strong is a piece of spaghetti?</p> 



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### Block E and Block F (Summer Term)

Year	Block E	Block F
1	<p><b>Core discipline:</b> Textiles</p> <p><b>Key concept:</b> Joining techniques</p> <p>How can two squares of fabric keep you warm? CUSP link: Hot and cold places</p> 	<p><b>Core discipline:</b> Food and Nutrition</p> <p><b>Key concept:</b> Vitamins in food</p> <p>Why are vegetables the best?</p> 
2	<p><b>Core discipline:</b> Food and Nutrition</p> <p><b>Key concept:</b> Processed food</p> <p>How healthy is your food?</p> 	<p><b>Core discipline:</b> Structures</p> <p><b>Key concept:</b> Developing strength in structures</p> <p>How strong is a piece of paper?</p> 
3	<p><b>Core discipline:</b> Systems</p> <p><b>Key concept:</b> How things are powered</p> <p>How are things powered?</p> 	<p><b>Core discipline:</b> Structures</p> <p><b>Key concept:</b> Spanning gaps</p> <p>What makes a bridge strong?</p> 
4	<p><b>Core discipline:</b> Electrical Systems</p> <p><b>Key concept:</b> Switches and circuits revisited</p> <p>How useful are switches? CUSP link: Electricity</p> 	<p><b>Core discipline:</b> Food and Nutrition</p> <p><b>Key concept:</b> Benefits of fresh food</p> <p>Is cheap food always worse for you? CUSP link: Animals, including humans</p> 
5	<p><b>Core discipline:</b> Structures</p> <p><b>Key concept:</b> Developing structures that are fit for purpose</p> <p>How are frames strengthened, reinforced and made rigid?</p> 	<p><b>Core discipline:</b> Mechanisms</p> <p><b>Key concept:</b> Pulleys and gears - transferring rotational force</p> <p>How can you lift a car onto a roof? CUSP link: Forces</p> 
6	<p><b>Core discipline:</b> Electrical Systems</p> <p><b>Key concept:</b> Complex switches and circuits</p> <p>Can switches perform more than one function? CUSP link: Electricity</p> 	<p><b>Core discipline:</b> Textiles</p> <p><b>Key concept:</b> Sustainable materials</p> <p>How can you reduce, recycle, repurpose?</p> 