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# PLANNING & TRACKING

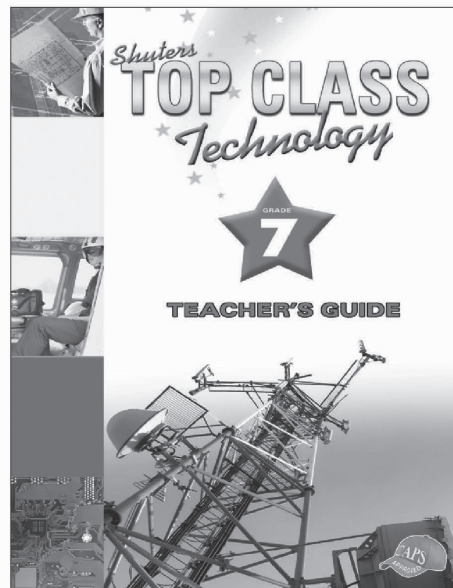
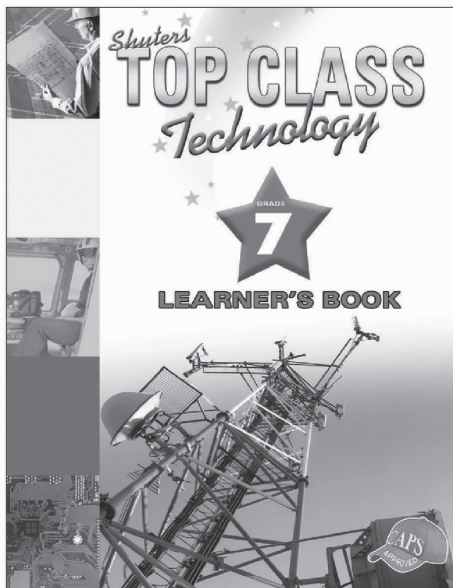
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## *Shuters* **TOP CLASS** *Technology*



Grade

# 7



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TERM 1					
WEEK	UNIT	TOPIC	PAGE	RECORDING	REFLECTION
	<b>1</b>	<b>Design process skills</b> <i>1 week (2 hours)</i>	TG 1 LB 1-12		
		• Introduction - What is technology?	TG 1 LB 1		
		• The development of a technology task	TG 3 LB 5		
		• Design considerations	TGp 7 LBp 11		
	<b>2</b>	<b>Communication skills</b> <i>2 weeks (4 hours)</i>	TG 8 LB 13-25		
		• Purpose of graphics			
		• Conventions	TG 9 LB 15		
		• Free-hand sketching	TG 10 LB 16		
		• Working drawings	TG 10 LB 18		
	<b>3</b>	<b>Simple mechanisms</b> <i>2 weeks (4 hours)</i>	TG 14 LB 26-33		
		• Levers – first-class, second-class and third-class			
	<b>4</b>	<b>Investigation skills</b> <i>1 week (2 hours)</i>	TG 21 LB 34-44		
		• Practical investigation: Levers and linkages	TG 14-20 LB 26-33		
		<b>Formal Assessment Task 1: Mini-PAT</b> <i>3½ weeks (7 hours)</i>	TG 26 LB 39-40		
		• Levers, linkages, hydraulics and pneumatics	TGp 27 LB 40		
		<b>Formal Assessment Task: Test</b> <i>½ week (1 hour)</i>	TG 32 LB 45		

TERM 2					
WEEK	UNIT	TOPIC	PAGE	RECORDING	REFLECTION
	<b>5</b>	<b>Structures</b> <i>1 week (2 hours)</i>	TG 35 LB 48-55		
		• Definition and purpose of structures	TG 36 LB 49-50		
		• Classification of structures	TG 37 LB 50		
		• Types of structures	TG 37 LB 51		
	<b>6</b>	<b>Investigate a cell phone tower – a frame structure</b> <i>½ week (1 hour)</i>	TG 40 LB 56-59		
		• Investigate a cell phone tower	TG 40		
		• Case study: Examine existing towers	TG 41 LB 57		
		• Evaluate advantages and disadvantages of telephone systems	TG 43 LB 59		
	<b>7</b>	<b>Action research – Stiffen materials and structures</b> <i>½ week (1 hour)</i>	TG 44 LB 60-65		
		• Practical activity 1 – Stiffen a structural material by tubing	TG 45 LB 60		
		• Practical activity 2 – Stiffen a structural material by folding	TG 45 LB 61		
		• Practical activity 3 – Stiffen a frame structure by triangulation	TG 46 LB 62		
	<b>8</b>	<b>Investigating design issues</b> <i>1 week (2 hours)</i>	TG 47 LB 66-75		
		• Case study: Existing cell phone towers	TG 48 LB 66		
		• Class discussion: needs of society and impact of technology	TG 49 LB 71		
		• Case study: Existing designs 1: features of a school desk	TG 50 LB 72		
		• Case study: Existing designs 2: features of FM radio or cell phone	TG 51 LB 74		
		<b>Formal Assessment Task 2: Mini-PAT</b> <i>4 weeks (8 hours)</i>	TG 52 LB 76		

TERM 2					
WEEK	UNIT	TOPIC	PAGE	RECORDING	REFLECTION
		<ul style="list-style-type: none"> <li>• Frame structures</li> </ul>			
		<b>Formal Assessment Task: Test 2</b> <i>3½ weeks (7 hours)</i>	TG 59 LB 80		

TERM 3					
WEEK	UNIT	TOPIC	PAGE	RECORDING	REFLECTION
	<b>9</b>	<b>Magnetism</b> <i>1 weeks (2 hours)</i>	TG 61 LB 84-87		
		<ul style="list-style-type: none"> <li>• Investigate: What is magnetism?</li> </ul>	TG 61		
		<ul style="list-style-type: none"> <li>• Practical investigation: Different types of magnets</li> </ul>	TG 62 LB 84		
		<ul style="list-style-type: none"> <li>• Experiment: Which substances stick to a magnet?</li> </ul>	TG 63 LB 86		
	<b>10</b>	<b>Testing metals and recycling</b> <i>1 week (2 hours)</i>	TG 64 LB 88-91		
		<ul style="list-style-type: none"> <li>• Experiment: Which metals are attracted by a magnet?</li> </ul>	TG 64 LB 88		
		<ul style="list-style-type: none"> <li>• Case study: Recycling scrap metals</li> </ul>	TG 65 LB 89		
		<ul style="list-style-type: none"> <li>• Recycling scheme for your school</li> </ul>	TG 65 LB 90		
	<b>11</b>	<b>Simple electric circuits</b> <i>1 week (2 hours)</i>	TG 66 LB 92-99		
		<ul style="list-style-type: none"> <li>• Simple electric circuits</li> </ul>	TG 67 LB 94		
		<ul style="list-style-type: none"> <li>• Practical: make a simple circuit</li> </ul>	TG 69 LB 96		
		<ul style="list-style-type: none"> <li>• Circuit diagrams using correct symbols and components</li> </ul>	TG 69 LB 96		
		<ul style="list-style-type: none"> <li>• Demonstration lesson: A simple electromagnet</li> </ul>	TG 70 LB 97		
	<b>12</b>	<b>Mechanical systems and control</b> <i>1 week (2 hours)</i>	TG 72 LB 100-106		
		<ul style="list-style-type: none"> <li>• All complex machinery consist of combinations of simple mechanisms</li> </ul>			
		<ul style="list-style-type: none"> <li>• Cranks and pulleys</li> </ul>	TG 74 LB 101		

TERM 3					
WEEK	UNIT	TOPIC	PAGE	RECORDING	REFLECTION
		<ul style="list-style-type: none"> <li>Revision: mechanical advantage and strengthening frame structures</li> </ul>	TG 75 LB 105		
		<b>Formal Assessment Task 3: Mini-PAT</b> <i>5½ weeks (11 hours)</i>	TG 77 LB 100		
		<ul style="list-style-type: none"> <li>Structures and electricity/ cranks and pulleys</li> </ul>			
		<b>Formal Assessment Task: Test 3</b> <i>½ week (1 hour)</i>	TG 83 LB 114		

TERM 4					
WEEK	UNIT	TOPIC	PAGE	RECORDING	REFLECTION
	<b>13</b>	<b>Investigating emergency situations</b> <i>1 week (2 hours)</i>	TG 85 LB 117-123		
		<ul style="list-style-type: none"> <li>Situations that result in people becoming refugees</li> </ul>	TG 85 LB 117		
		<ul style="list-style-type: none"> <li>Initial problems faced by refugees</li> </ul>	TG 87 LB 119		
	<b>14</b>	<b>Processing food: emergency food</b> <i>2 weeks (4 hours)</i>	TG 90 LB 124-128		
		<ul style="list-style-type: none"> <li>The types of food that can be given to people in a refugee camp</li> </ul>	TG 92 LB 126		
		<ul style="list-style-type: none"> <li>Design brief and specifications of food for a population of 100 refugees</li> </ul>	TG 93 LB 127		
		<ul style="list-style-type: none"> <li>List ingredients of a meal that will be nutritious and tasty</li> </ul>	TG 91 LB 126		
		<ul style="list-style-type: none"> <li>Sequence of manufacture</li> </ul>			
		<ul style="list-style-type: none"> <li>Learners prepare and evaluate a meal</li> </ul>	TG 93 LB 127		
	<b>15</b>	<b>Clothing in specialised occupations</b> <i>1 week (2 hours)</i>	TG 95 LB 129-135		
		<ul style="list-style-type: none"> <li>Textiles that are used to make clothing worn by fire fighters</li> </ul>	TG 97 LB 133		

TERM 4					
WEEK	UNIT	TOPIC	PAGE	RECORDING	REFLECTION
		<ul style="list-style-type: none"> <li>Textiles that are used to make clothing worn by members of the NSRI</li> </ul>	TG 98 LB 134		
		<b>Formal Assessment Task 4:</b> <b>Mini-PAT</b> <i>3 weeks (6 hours)</i>	TG 99 LB 136-139		
		<ul style="list-style-type: none"> <li>Properties of materials</li> </ul>			
		<b>Formal Assessment Task:</b> <b>End-of-year examination</b> <i>(1½ hours)</i>	TG 109 LB 144		

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