Key Competencies: Year 9

Term One	Term Two	Term Three	Term Four
The Technology Cycle and associated Terminology	*The Technology Cycle and associated Terminology*	*The Technology Cycle and associated Terminology*	*The Technology Cycle and associated Terminology*
	Brief Development	*Brief Development*	*Brief Development*
		Planning	*Planning*
			Outcome Development and Evaluation

Technological Practice with emphasis on area specific knowledge and skills.

Shaded area refers to key teaching focus.

Refers to key competencies that should now be embedded in student practice.

Food **(Food for Teenagers)**	**ICT** **(PP Presentation)**	**Graphics** **(Pop up Card)**	**Materials/or** → **(Flower Power)**	**Materials** **(Mechanical Toy)**
When engaging in technological practice students will access Knowledge and Skills in: • Working with a Given Issue/Class Brief/Developing Own Brief/Planning/Evaluation. • Profiles to establish the needs of the named person (member of group/peer) • Opinion of stakeholder in relation to named stakeholder • Codes of Practice (Safety/Hygiene) • Measuring • Use of specialist equipment • Hard copy research. • Adapting and producing base recipes • Product Development • Sensory Analysis • Evaluation Tools (sensory analysis, product attributes) • Four Food Groups • Healthy Diet Pyramid • Calcium/Osteoporosis.	**When engaging in technological practice students will access Knowledge and Skills in:** • Working with a Given Issue/Class Brief/Developing Own Brief/Planning/Evaluation. • Self profile • ? • typing skills • functions of a computer • file management • codes of practice (ergonomics) • Drawing • Word Art • Clip Art • Power Point	**When engaging in technological practice students will access Knowledge and Skills in:** • Working with a Given Issue/Class Brief/Developing Own Brief/Planning/Evaluation • The needs of the named person (member of group/peer) • Opinion of stakeholder in relation to named stakeholder • Sketching 2D/3D • Rendering Texture/Tonal Change • Use of drawing instruments • Formal drawing accuracy/quality • Folding/Cutting card • Codes of Practice (safe use of cutting equipment) • Hard copy research • Exploration and understanding of pop up mechanisms. • Product Development. • Manufacture of card	**When engaging in technological practice students will access Knowledge and Skills in:** • Working with a Given Issue/Class Brief/Developing Own Brief/Planning/Evaluation. • The needs of the named person (member of group/peer) Opinion of stakeholder in relation to named stakeholder • Marking Out/Measuring • Use of hand tools/ • Use of machinery • Codes of Practice (Safety) • Joining and finishing techniques when using acrylics. • Product Development • Freehand/Sketching/Formal drawing • Modelling/Mock Up • Manufacturing.	**When engaging in technological practice students will access Knowledge and Skills in:** • Working with a Given Issue/Class Brief/Developing Own Brief/Planning/Evaluation • The needs of the named person (member of group/peer) Opinion of stakeholder in relation to named stakeholder • Electronic research • Movement/mechanisms • Product Attributes • Codes of Practice (safe use of machinery) • Joining and Framing • Product Development • Modelling • Working drawing • Manufacturing • Finishing techniques

Food **(Food for Teenagers)**	**ICT** **(It's a Date)**	**Graphics** **(Pop up Card)**	**Materials/or** **(Flower Power)**	**Materials** **(Mechanical Toy)**
Understanding of /skill in: Industry Practice Codes of Practice ▪ personal hygiene ▪ safe handling of food ▪ correct order of dishwashing (rinsing, stacking, washing, drying) Measuring ▪ using measuring spoons, cups and electronic scales Use of Specialist Equipment ▪ safe use of gas hobs, ovens, grill, food processor, microwave ▪ Food technology terms Sensory analysis ▪ use of attributes to describe taste, texture, smell and visual appearance ▪ identifying 4 tastes – sweet, sour, salty, bitter ▪ showing how colour is an important factor when determining flavour	Understanding of/skill in: Codes of Practice _ Design principles (balance, harmony, sequence, proportion) _ Copyright rules _ Privacy (ethics) _ Respect and use of equipment: (computer and peripherals, laminator, binder, printers, paper usage, chairs) Keyboard Skills _ Correct finger pathways and navigation of keyboard Basic Computer Functions _ Start up the computer _ Log on/Log off/Shutdown _ Saving to external storage devices	Understanding of /skill in: Sketching ▪ crating ▪ line work - construction and finished line work, ▪ proportion – length, width, height ▪ 2D freehand ▪ 3D – freehand oblique/ isometric Rendering ▪ tonal change – light/ dark Instruments ▪ using equipment accurately – tee square, set squares $30/60^{o}$, 45^{o}, pencil lead weight (2H/HB) ▪ line work – construction, and finished line work , quality and accuracy	Understanding of /skill in: Marking out ▪ squaring off/parallel ▪ scribing ▪ rules, measuring, metric system (standards) Hand tools ▪ the common use and correct use of hand tools Machining ▪ basic machine use – scroll saw, bandsaw, drill press, sander and buffer Codes of Practice ▪ safety in workshop, use of tools and machines ▪ correct working procedures to gain desired outcome (teacher given)	Understanding of /skill in: Cranks and cams and motions produced – reciprocating, linear, rotary and oscillating motions Knowledge of motions and systems Attributes – aesthetics, function, form, size, weight, materials, finishing Codes of Practice – use of a bandsaw, sanding machine, scroll saw and vertical drill Techniques – marking out, cutting, shaping, jointing, use of face and edge marks

Four food groups ▪ identifying, number of servings for an adolescent ▪ categorizing food into 4 food groups Healthy food pyramid ▪ well balanced eating ▪ how the 4 food groups fit into the pyramid Calcium ▪ identifying calcium rich foods ▪ understanding osteoporosis as a condition associated with lack of calcium in teen years ▪ bone density and parts of bone ▪ RDI of milk and milk products Practical skills ▪ blending, mixing, chopping, slicing, roux making, muffin making, pasta cooking, beating, folding	File Management _ Create a new folder _ Rename folders _ Create a new file _ Save into a specific folder _ Rename files _ Close files _ Open existing files _ Delete files Software Applications _ Microsoft Word _ Microsoft Publisher _ Microsoft PowerPoint _ Adobe Photoshop _ Internet Usage Additional Equipment _ Scanner _ Laminator _ Digital camera _ Binder _ Printers (mono/colour)	Formal Drawing ▪ 3D – isometric, oblique ▪ 2D orthographic projection (three views) Working with Card ▪ folding – marking out accurately, scoring ▪ jointing – lap and butt joints, use of tabs ▪ adhesives – characteristics and properties (double sided tape, spray adhesive, glues, magic tape) ▪ cutting equipment – cutting matt, craft knifes, rotary cutter, scissors	Joining and finishing ▪ butt joint, lap joint, acrylic glues ▪ finishing – filing, sanding, buffing Development of a mock-up to working drawing (to test and trial ideas) Formal drawing ▪ orthographic, scale, dimensioning Manufacturing ▪ best use of time, logical sequence, ability to work cooperatively, production of a quality outcome.	Jointing methods – housing joint, lap joint Product development – idea exploration, concept development, incorporation of a mechanism, 2D presentation Working drawing – full size front elevation of moving toy showing details of frame, cams, axle, follower and moving toy part