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| **Developing outcomes could involve one or more operations:** | **Food Technology** | **Resistant Materials** | **Fabric Technology** | **Mātauranga Māori / Taonga** | **Other** |
| **TRANSFORMING**L1 Definition: * transforming by altering the structure
 | Working with existing materials in ways that change their structure to maximise product performance | Dehydrating Fruit rolls Freeze dry* Fruit (Berries etc)
* Meals for hiking

Making * Peanut butter
* Biltong

Fermentation one ingredient* Sauerkraut

Smoking* Tuna (eel)
* Cheese
* Bacon
* Fish – kippers, salmon, trout

Chocolate  | * Shredding plastic
* Timber into sawdust.
* Metal shavings
* 3D printing – extrusion
* Vacuum forming Pokepoke korekore
* Forging/hammering(pounding)
* 3D printing – using PLA
* Melting and re-extruding, moulding plastics
 | FeltingBatikThreads and offcuts of fabricsAligning and drawing fibres to spin yarn using s or z twist | * Kawakawa Tea
* Kānga pirau – rotten corn

Harakeke – stripping/dyeing more info* Processing harakeke– hapene (hāpine) to alter structure in preparation for weaving (softens, prevents cracking)

PutiputiMuka – for weaving fabrics and making vine kī for sportsManu aute – the faceHue – Gourd– storage containers-water, food preservation, instruments  | PotteryCeramics |
| **Developing outcomes could involve one or more operations:** | **Food Technology** | **Resistant Materials** | **Fabric Technology** | **Mātauranga Māori / Taonga** | **Other** |
| **COMBINING**L1 Definition: * combining by mixing materials
 | **Incorporating** at least one material with another to maximise product performance.Must be used together to function as needed. associate, connect, link, relate, and unite. | Whipped cream with icing sugarKimchiVinegar/onion picklingWet and dry ingredientsMaking a batter / a base / a doughMaking muesli | Waxing/staining/varnishing woodCombining materials* Resin material inserts
* Powder coating metal
* Fabric and resin on timber
 | PatchworkAppliqueScreen printingfusing stabiliser to fabric yarn production – e.g. poly/cottonfabric production – e.g. sportwear incorporating lycraBuckram – to stiffen  | Fry bread batterPōhā tītī – food preservation and storage in Ngāi Tahucombining different materials e.g wood and resinBone and woodBone and pounamuBone and stain Māra hūpara (crafted wood – refer Harko Brown)Tukutuku panels – hard flax through wood Aute cloth – Māori tapa cloth  | Glazing of Pottery, ceramicsMosaicsLed lightingWelding…. More infoSoldering – electronicsCombination of knowledges Wool and feathers - korowai |
| **Developing outcomes could involve one or more operations:** | **Food Technology** | **Resistant Materials** | **Fabric Technology** | **Mātauranga Māori / Taonga** | **Other** |
| **MANIPULATING**L1 Definition:* manipulating materials without changing their structure or composition
 | Working with existing materials in ways that do not change their composition and structure, or their properties. Manipulation in ways that maximise its contribution to the overall performance of the product - Technology Education in NZ – a guide for teachers | Icing a cakeCoating a product The humble potato* Mash
* Roast
* Boil
* Rosti
* fry
 | * Laminating
* Lazer cutting
* CNC machining
* Steam bending plywood
* Sheet metal bending
 | Heat setting pleats – would heat setting change the structure of the fibre? Vinyl cuttingGatheringSmockingPleatsReducing fullness | Rua kumara – kūmara storageCarving* bone
* pounamu
* wood

waka, jewellery, raupō whare, clay whareMoulds* pewter

Manu tukutuku, manu taratahi – body of the kites | Air dry clay / polymerEmbossing – raised relief against a backgroundDebossing – recessed relief sunken into the surface of a material* Images and designs in multiple materials.
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| **Developing outcomes could involve one or more operations:** | **Food Technology** | **DResistant Materials** | **Fabric Technology** | **Mātauranga Māori / Taonga** | **Other** |
| **FORMING:**L1 Definition:* forming to create a new material
 | Bringing oneor more materials together to create a new material that has a different chemical composition and/or structure with different performance properties – Technology Education in NZ – a guide for teachers.  | Oat/almond/potato MilkYogurtIce CreamKombuchaDeep frying of battered item Making a muesli bar | * Wood + wax = fibre board
* Glass + polymer = fibre glass or fibre polymer
* 3D printing+ e.g
 | Knitting – acrylic with a wool for durability Crochet Weaving – warp/weftYarn – wool carded and twisted with polyester for strengthAdding additional and unexpected materials e.g copper wire, tinsel, twigs to any of the above | Rēwena BreadRongoā (Māori Medicine)Muka is prepared fibre of New Zealand flax. Prepared primarily by scraping, pounding, and washing, it is a key material in Māori traditional textiles where it is usually used in tāniko or twined weaving.Harakeke paperNatural dyes – purple from poroporo plant | Making PaperComfrey and kawakawa cream  |