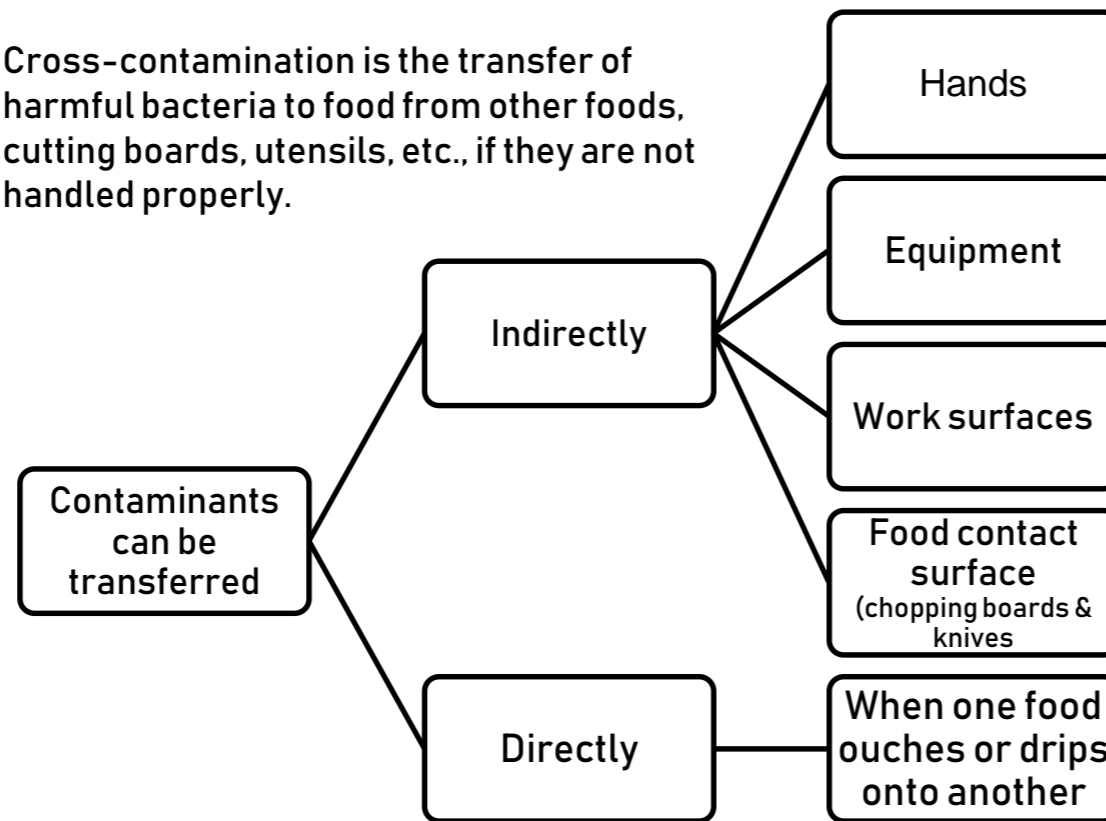


# Year 8 Cooking & Nutrition Knowledge Organiser

## Food Hygiene

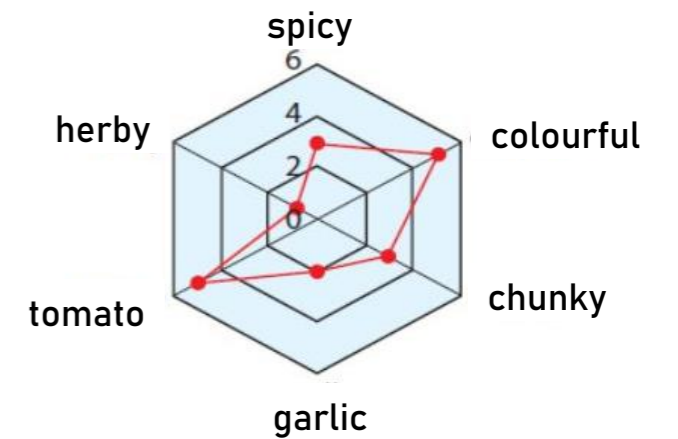


Cross-contamination is the transfer of harmful bacteria to food from other foods, cutting boards, utensils, etc., if they are not handled properly.



## Sensory Testing/Star Profile Charts

- These kind of tests can be used to find out what people particularly like about a food product to help build up a profile of it according to a range of sensory qualities such as saltiness, smoothness, crispiness, flavour.
- Star profile - This type of test gets testers to describe the appearance, taste and texture of a food product on a star chart.



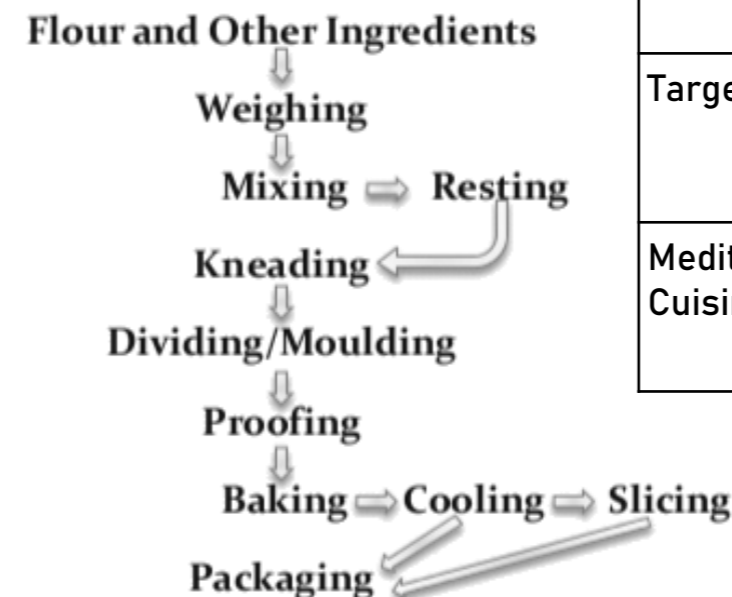
## Hygiene & Safety Rules

- Tie up long hair
- Wear an apron
- Tuck tie in
- Wash hands
- No running
- Use oven gloves when necessary
- Clean practical equipment thoroughly

## Strategies for Choosing Recipes

1. Pick recipes based on common ingredients that are easy to get.
2. Cook things you really want to eat.
3. Check if you have the correct equipment required for making.
4. Do you have the skills to make the dish?
5. Do you have the time to make the dish?

## Bread Production Flow Chart



## Key vocabulary

Design Brief	An written outline which explains the aims and objectives and milestones of a design project.
Task Analysis	Breaking a design brief down to understand the requirements of the task.
Target Audience	The person or people most likely to be interested in your design or product.
Mediterranean Cuisine	Food from the countries that surround the Mediterranean Sea.

## Example Time Plan



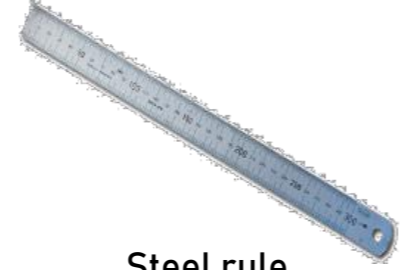







Time	Process	Hygiene & Safety
8:50 - 9:00	Collect all equipment and ingredients. Wash hands.	Is fridge 0°C - 4°C?
9:00 - 9:15	Dice onion, peppers and mushrooms.	Use a green chopping board. Use bridge and claw techniques.
9:15 - 9:30	Thread vegetables onto a skewer. Make dressing.	Ensure skewer has been soaked in cold water.



# Year 8 Product Design Knowledge Organiser

## Picture Frame Clock Design

### Key Skills

- Responding to a Design Brief & identifying an audience
- Developing CAD skills using 2D Design tools to create a clock face design appropriate for a target audience
- Applying Health & Safety procedures and PPE in the workshop environment
- Identify specific workshop tools and equipment
- Developing practical skills to create lap & rebate joints to join materials
- Knowledge of specific timbers & their origins
- Inserting a clock mechanism
- Prototype modelling including finishing & presentation skills
- Evaluating the manufacturing process

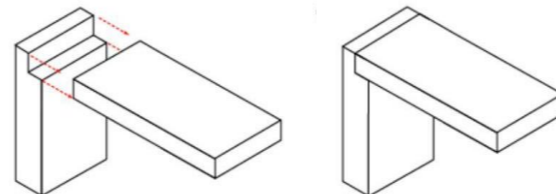
Tools for working with Timber	
 Try square	 Bench vice
 Steel rule	 Marking gauge
 Tenon saw	 File
 Belt & Disc Sanders	 Coping Saw
 Bench hook	 Pillar drill

Key vocabulary	
Function	What a product does, how it works and what it will be used for?
Target Audience	The person or people most likely to be interested in your design or product.
Wood grain	Wood grain is the pattern made by the wood fibres in trees when it grows.
Materials	What something is made from.
Clock mechanism	This is the engine of a watch that makes the clock and its functions work.
Finishing	The process of applying a finish to preserve or protect a material & improve aesthetics.
Modelling	To present ideas in 2D & 3D to the user (target audience) or client.
Prototype	A prototype is a model that is built to test to see if it is successful or whether it needs further modification or improvements.
PPE	Personal protective equipment are items
Timber is a natural material with imperfections, knots and grain - always sand with the grain	
Softwood 	From coniferous trees that are evergreen, which are faster to grow and are less expensive than hardwoods. Softwoods are a sustainable material as the resource can be regrown and not depleted. Softwoods are strong and easy to work with.
Manufactured boards are timber produced by gluing wood layers or wood fibres together.	
Medium Density Fibreboard 	Medium Density Fibreboard or also known as MDF is made from wood fibres which are glued together. MDF has a smooth even surface which makes it easier to work than natural timber.

### Joining materials – construction techniques

#### Lap & Rebate joints

A lap or rebate joint is where two pieces of material overlap. This joint can be used to join wood, plastic, or metal.





# Year 8 Product Design Knowledge Organiser

## Pizza Cutter


### Key Skills


- Responding to a Design Brief
- Identifying a target audience and product function
- Applying Health & Safety procedures and PPE in the workshop environment
- Developing practical skills to shape and manipulate acrylic and aluminium
- Become confident in joining methods suitable for plastics and metals
- Develop an ergonomic design for users
- Identifying specific workshop tools and equipment
- Manufacturing a prototype model
- Finishing materials
- Presentation skills
- Evaluating the manufacturing process

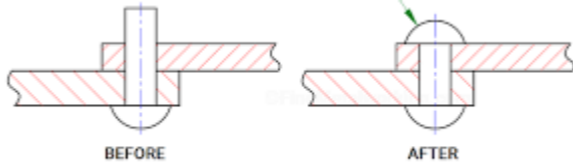
Tools for working with metal and plastic	
 <p>Ball Pein Hammer</p>	 <p>Bench vice</p>
 <p>Steel rule</p>	 <p>Scriber</p>
 <p>Center Punch</p>	 <p>File</p>

Key vocabulary	
Ergonomics	Ergonomics aims to make sure that tasks, equipment, information and the environment fit each worker.
Turning	Turning is the process of using lathes to remove material from the outer diameter of a rotating workpiece.
Diameter	In geometry, a diameter of a circle is any straight line segment that passes through the center of the circle and whose endpoints lie on the circle.
Materials	What something is made from.
Tolerance	Engineering tolerance is the permissible limit or limits of variation in: a physical dimension; a measured value or physical property of a material, manufactured object, system, or service; other measured values
Finishing	The process of applying a finish to preserve or protect a material & improve aesthetics.
Prototype	A prototype is a model that is built to test to see if it is successful or whether it needs further modification or improvements.
PPE	Personal protective equipment are items such as goggles and aprons.

 <p>Metalworking Lathe</p>	 <p>Abrasive Paper</p>	 <p>Buffing Wheel</p>	 <p>Pillar drill</p>
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Aluminium	
	Aluminium is the most abundant metal in the Earth's crust (8.1%) but is rarely found un-combined in nature. It is usually found in minerals such as bauxite and cryolite. These minerals are aluminium silicates.

Acrylic	
	Acrylic is a transparent plastic material with outstanding strength, stiffness, and optical clarity. Acrylic sheet is easy to fabricate, bonds well with adhesives and solvents, and is easy to thermoform. It has superior weathering properties compared to many other transparent plastics.

Joining materials – construction techniques	
<p>A rivet is a permanent mechanical fastener. Before being installed, a rivet consists of a smooth cylindrical shaft with a head on one end. The end opposite to the head is called the tail.</p>	

# Year 8 Textiles Knowledge Organiser

## Sustainable Children's Toy



### Key Skills

- Responding to a Design Brief
- Analysing existing products
- Identifying a target audience
- Designing & annotating to include a range of a range of decorative and construction techniques
- Demonstrating ability to complete decorative techniques:
  - Tie dye
  - Appliqué
  - Hand embroidery stitches (running stitch, blanket stitch)
- Using a range of construction techniques:
  - 3D features
  - Inserting wadding
  - Applying buttons & googly eyes
  - Sewing seams on the sewing machine
- Understanding the properties of materials:
  - Natural fibres & organic fabrics



Product features	
Consideration of a specified target market	Appliqué or reverse appliqué
Engaging & stimulating	Creative & individual
Recycled materials & components as decoration	Features are in proportion to the body shape
Organic Cotton fabric	Accurate machine stitches
3D features	Seam allowance
Hand embroidery	Sustainable

Health & safety
Follow teacher instructions
Move slowly around the room do not run
Tie long hair back
Hold scissors or shears correctly when walking around the room.
Only one person operating a sewing machine at one time
Never use a sewing machine unless supervised by a teacher/ technician
Turn off the sewing machine when not in use.
Report any injuries or breakages to the teacher immediately

Key vocabulary	
Design Context	The circumstances, problem or setting in which a product will be used.
Design Brief	An written outline which explains the aims and objectives of a project.
Target Audience	The person or people most likely to be interested in your design or product.
Function	What a product does, how it works and what it will be used for? Is it sensory or educational or both?
Sustainable	Conserving an ecological balance by avoiding the depletion of natural resources.
Organic Cotton	Cotton that is produced without the use of chemical fertilizers, pesticides, or other artificial chemicals that can pollute the environment and be harmful to the producer.
Fairtrade	When producers in developing countries are paid a fair price for their work.
Materials	What the product is made from?
Components	The parts/materials/threads needed to make a product.
Interactive	Components or features that can be attached/detached or have different textures
3D features	Use of wadding to make a feature stand up or raised off the backing fabric
Aesthetics	How a product or design looks .
Embroidery	Even stitch widths and lengths completed by hand sewn stitches
Reverse appliqué	A decorative technique whereby a fabric is sewn on the reverse of the top fabric and is visible from the front
Appliqué	A decorative technique whereby one material is sewn on top of another by machine
Tie dye	Patterns in cloth created by tying parts so its resists the dye.