



YEAR 7 ENGINEERING

To be able to design independently, working safely in the engineering workshop.

To be able to produce creative designs that are well annotated.

To be able to mark, cut and shape materials with accuracy.

To be able to use a range of tools and equipment in the workshop with little guidance.

To be able to evaluate practical work and suggest ways in which to develop their final outcome.

Spot Welder



This piece of equipment is used to connect two pieces of metal together. It is a permanent joining method.

Scriber



A **Scriber** is a hand tool used in metalworking to mark lines on work pieces, prior to machining. The process of using a **scriber** is called scribing and is just part of the process of marking out.

Engineer's square



A typical use of an engineer's try-square is to mark out material for cutting/shaping. It is used to help draw straight and accurate lines.

Steel Rule

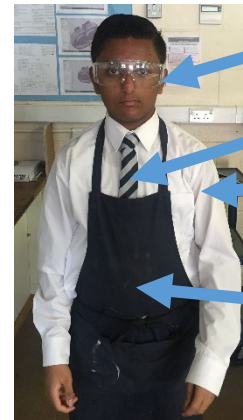


The **steel rule** is a basic measuring tool. When used correctly, a good **steel rule** is a surprisingly accurate measuring device.

It is used with the Scriber.

Safety

1. You must always wear an apron when doing a practical.
2. You must never run in the workshop.
3. Always put the stools away.
4. Always wear goggles when using machines.
5. Only 1 person to a machine at a time.



Goggles

Tie tucked in

No blazer on

Apron

Key Words

Design
Engineering
Safety
Spot Welder
Annotation
Creativity
Accurate

Bench Shears



A **bench shear**, also known as a lever **shear**, is a bench-mounted **shear** with a compound mechanism to increase the mechanical advantage. It is usually used for cutting rough shapes out of medium-sized pieces of sheet metal but cannot do delicate work.



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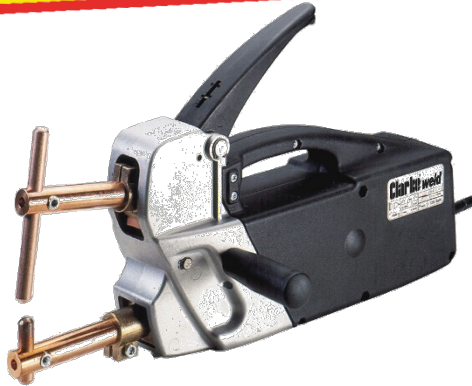
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Spot Welder

This piece of equipment is used to connect two pieces of metal together. It is a permanent joining method.

What safety equipment would you need to wear when using this machine?



Scriber



What is this tool used for? Write your answer below:

Engineer's square



What is this tool used for? Write your answer below:

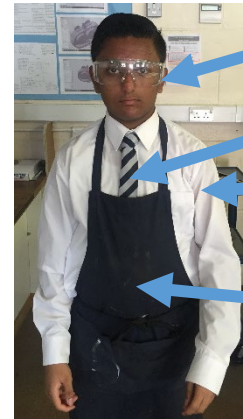
Steel Rule



What is this tool used for? Write your answer below:

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Bench Shears



A **bench shear**, also known as a lever **shear**, is a bench-mounted **shear** with a compound mechanism to increase the mechanical advantage. It is usually used for cutting rough shapes out of medium-sized pieces of sheet metal but cannot do delicate work.

Explain how to use this tool safely:

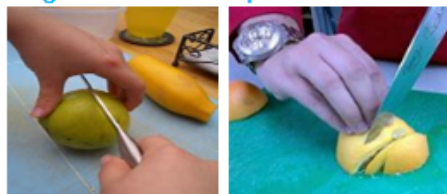


1. Measuring jug
2. Frying pan
3. Peeler
4. Measuring spoons
5. Casserole dish
6. Digital scales
7. Spoon
8. Plate
9. Chopping board
10. Weighing scale

Keyword	Meaning
Bridge Claw	Safe methods for using a knife to prepare food. The name describes the hand grip.
Enzymic Browning	When you slice some fruits or vegetables, e.g. apples, bananas, potatoes, the oxygen in the air turns them brown.
Glazing	Brushing with egg or milk before baking to give a shine. E.g. scones, pastry.
Rubbing In Technique	Combining fat and flour together using your fingertips. E.g. crumbles, scones.
Vegetable Knife	A small sharp knife used for preparing fruits and vegetables.
Whisking	Using a fork, or whisk to add air to a mixture.

Skills & Processes

Bridge & Claw Knife Grips



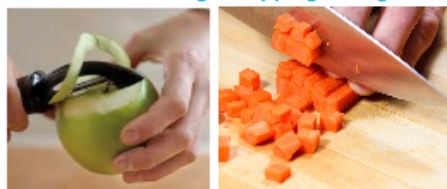
Used in: Fruit salad, layered dessert, mini omelettes and most other recipes.

Weighing & Measuring



Used in: Fruit crumble, scones, fruity flapjacks, mini omelettes and most other recipes.

Knife Skills – Peeling, chopping, dicing, slicing.



Used in: Fruit salad, layered dessert, mini omelettes and lots of other recipes.

Rubbing In Technique



Used in: Fruit crumble, scones, shortcrust pastry.

Independent skills I need to learn in year 7

- Use the **bridge and claw** to cut food safely and accurately.
- Use a range of other **preparation techniques**, e.g. peeling, chopping, slicing, grating etc.
- Weigh and measure** ingredients accurately.
- Organise** all my ingredients and follow a recipe.
- Use the **cooker**, select and adapt cooking times.
- Be able to check if food is cooked properly.
- Add **garnishes** and decoration to my food.



Colour Coded Chopping Boards

Stops **bacteria** spreading & causing **food poisoning**.

PREVENT CROSS CONTAMINATION

USE CORRECT COLOUR CODED CHOPPING BOARDS & KNIVES

- RAW MEAT
- RAW FISH
- COOKED MEATS
- SALADS & FRUITS
- VEGETABLES
- DAIRY PRODUCTS



To be able to follow hygiene and safety rules in the kitchen at all times.

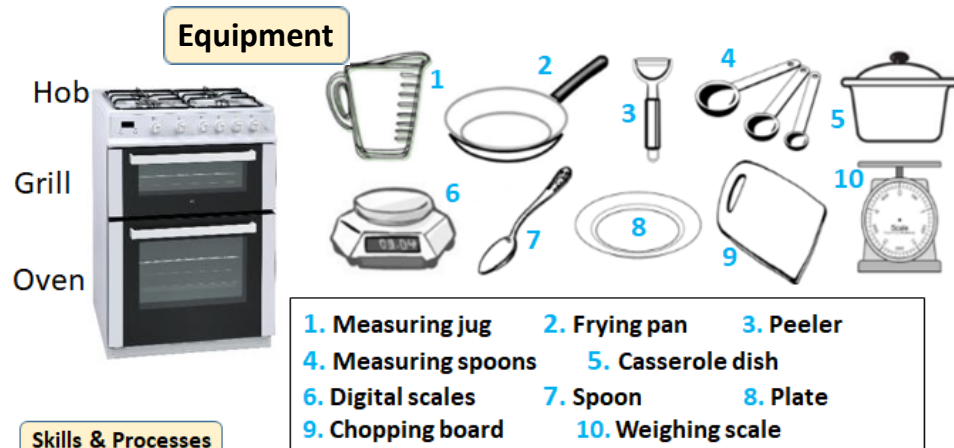
To be able to write my own recipe.

To be able to use a knife safely.

To apply skills to make a range of dishes.

To evaluate practical work and suggest areas for improvement.

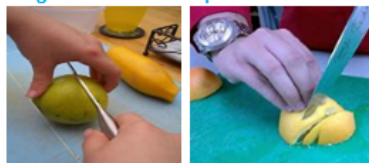
To understand the Eat Well Plate and healthy eating.



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Skills & Processes

Bridge & Claw Knife Grips



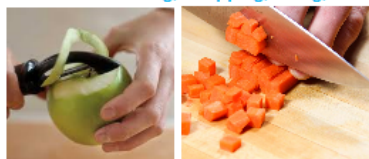
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- DAIRY PRODUCTS



What are the 4C's in the kitchen?
Write your answer below:

C
C
C
C

Why do we use different coloured chopping boards in the kitchen:
Write your answer below:

When have you used the rubbing in method in year 7 so far?
Write your answer below:

- To be able to follow hygiene and safety rules in the kitchen at all times.
- To be able to write my own recipe.
- To be able to use a knife safely.
- To apply skills to make a range of dishes.
- To evaluate practical work and suggest areas for improvement.
- To understand the Eat Well Plate and healthy eating.