



SIMPLE TOOLS

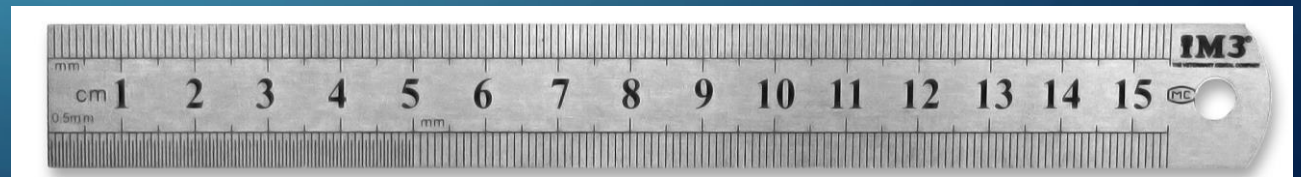
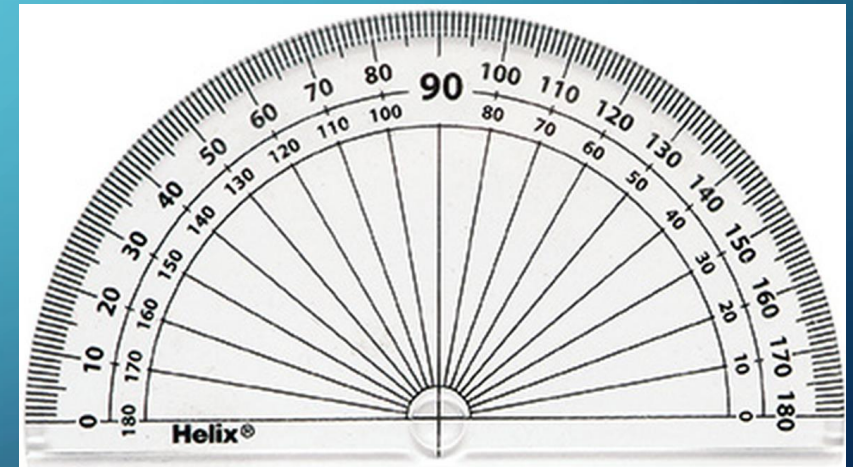
U4P2 – DESIGN AND TECHNOLOGY M1

SIMPLE TOOLS

- Simple tools are important for building objects in our projects
- Tools help us work faster, more efficient, precise...
- A tool can help us customize our object and design it how we want it
- It is important to choose the correct tool for the job
- Tools can be very easy to use or can be complicated
- For complicated tools we need knowledge and skills to use

TOOLS FOR MEASURING

- We have different types of tools that we use for measuring things
- Some of them are:
 - Rulers
 - Measuring tapes
 - Protractor



RULER

- Used for measuring smaller objects
- You should know how to use it



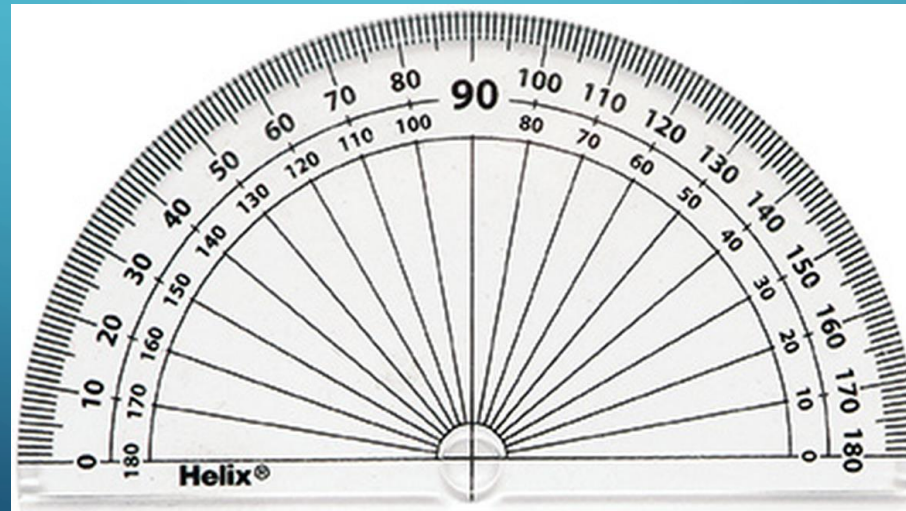
MEASURING TAPE

- Used for measuring longer objects or lengths
- Mostly used in construction
- Usually it's about 10m long
- The tape is made out of thin metal sheet
- At the end there is a hook with which we can attach it to an object that we measure
- We have to be careful when we roll it back so that we don't get hurt



PROTRACTOR

- Tool used for measuring degrees
- You should know how to use it



TOOLS FOR CUTTING

- We have different tools for cutting
 - Cutters
 - Scissors
 - Saw
 - Pliers
 - ...

CUTTER

- Used to cut objects like paper, cardboard, thin plastic, thin wood...
- We have to be careful when we use it so we don't cut ourselves
- When the blade gets dull we need to either replace it or snap the top part

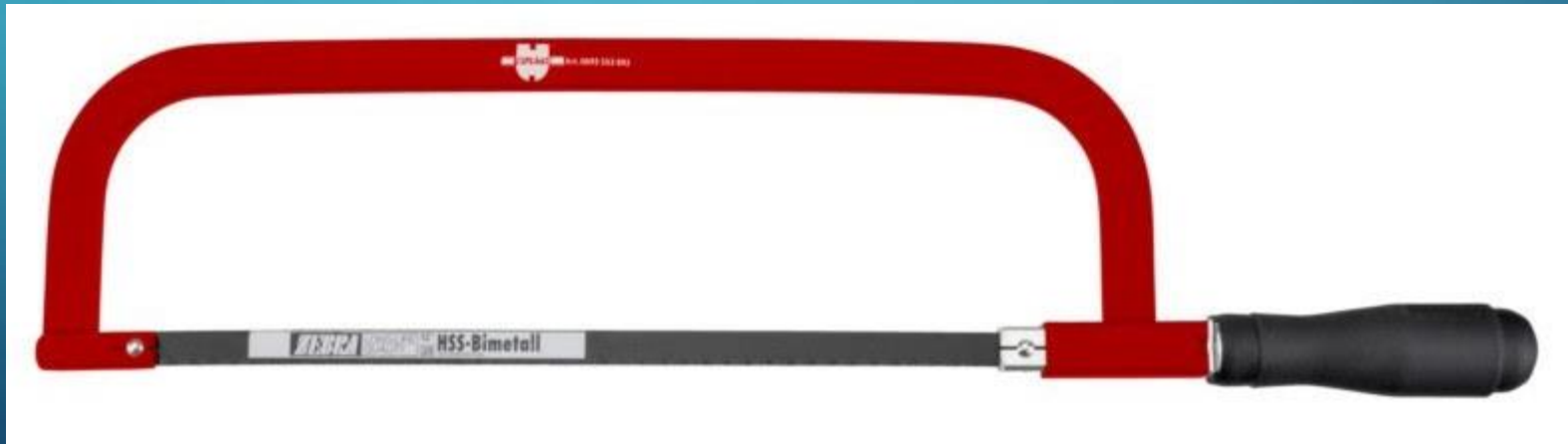


SCISSORS

- Scissors are used for cutting thin objects in straight lines, curved, zigzag...
- We can cut paper, cardboard, cloth, metal....
- We need to use appropriate type of scissors for each material

SAW FOR METAL

- Good for cutting metal but we can also cut wood and plastic with it
- The material that we are cutting shouldn't be too thick
- When we finish with our work we should put the saw back in a safe place



SAW FOR WOOD

- Used for cutting wood
- Can't use it for cutting metal
- It uses a thin metal sheet for cutting
- The handle can be made out of plastic or wood



PLIERS

- Pliers are used to cut thin metal object like electrical wires, metal wires, cables...
- We shouldn't use it for cutting big or hard metal objects
- When we finish we should put them back in a safe place



TOOLS THAT ALLOW US TO CONNECT TWO OR MORE OBJECT

- Sometimes we want to connect together two or more object so we need to use other types of tools
- We have two ways of connecting objects
 - Using adhesive substances
 - Physically attaching them together

USING ADHESIVE SUBSTANCES

- Adhesive tools use a type of material that is sticky when it is liquid, but when it dries it connects them together
- We have many types:
 - Latex glue
 - Rubber glue
 - Hot glue
 - Stick glue

LATEX GLUE

- Latex glue is used for sticking together objects like wood, paper, cloths...
- It takes time to dry
- If we want something to stick better together we need to leave it overnight
- When finished we need to close it because the glue will dry if we don't close it



RUBBER GLUE

- It can stick almost anything
- The texture is like a liquid gel and it can be yellow or transparent
- For efficient use leave it for at least an hour
- Not good for use with water, won't hold long
- After use we need to close it or it will dry



STICK GLUE

- Stick glue is a simple glue that is used for connecting things like paper and cardboard together
- Easy to use, doesn't make a mess and doesn't crumple the paper
- After use we have to close it



HOT GLUE GUN

- It is made out of two parts
 - First part looks like a gun and has wire for electricity, which heats the metal tube
 - 2nd part, glue stick that goes in the gun and melts from the heat
- Used for wood, rubber, plastic, thicker paper...
- When using it we need to be careful so we don't burn ourselves



SCREWDRIVERS

- Screwdrivers are used to physically attach objects together using screws
- Screws have a spiral on them which makes them stick in the wood harder
- We have many types of screwdriver heads but a flat and a cross head are the most common ones



TOOLS FOR MAKING HOLES

- We have tools that allow us to make holes
- Some of those tools are
 - Hole puncher
 - Hand drill
 - Electrical drill

HOLE PUNCHER

- Usually used for making holes in paper
- There are many sizes and usually the part that makes holes is made out of metal
- We shouldn't use it for too thick paper



HAND DRILL

- We need to use our own strength and energy to make it spin to make the hole
- It uses a drill bit on the end to make the hole
- It can make holes in wood, plastic, metal...
- But the material shouldn't be too thick



ELECTRIC DRILL

- Same as hand drill but doesn't need our energy, uses electricity
- Makes holes faster and easier
- We should use correct drill bits



SIMPLE TOOLS

- We have many different tools for same job which means we need to know what tool we have to use
- If we don't use the correct tool it will affect our work and our final product
- Before using the tools we need to know how to use them
- We need to wear safety equipment



THE END