



# DESIGN TECHNOLOGY KNOWLEDGE ORGANISER

## Topic: Wooden Wheeled Children's Toy Project



YEAR 8 DT

### My Tool Box



**Tenon Saw** – Used to cut straight lines in wood.



**Coping Saw** – Used to cut curves and internal shapes in



**Try Square** – Used to mark out right angles.



**Vice** – Used to hold an object.



**Hack Saw** – Used to cut metal.



**Pyro pen** – Used to burn designs into wood



**Pillar/Bench Drill** – Used to drill holes into different materials.



**Machine vice/Drill Press Vice** – Used to hold workpiece securely during drilling.



**Belt Sander** – Used to sand/smooth down different materials

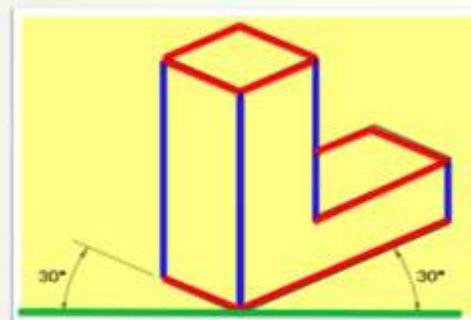
### Focused topics

#### 6 R's of Sustainability



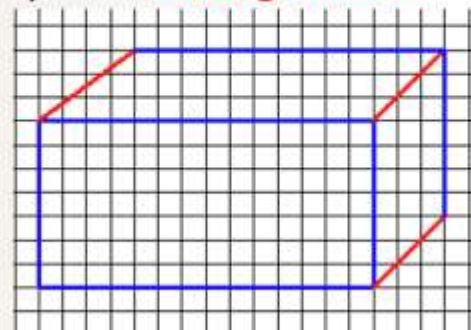
#### Isometric drawing

In isometric projection the drawing is made up of a series of parallel **vertical lines** and parallel **30 degree lines**. There are no **horizontal lines**.



#### Oblique drawing

In oblique projection the drawing is made up of a series of parallel **horizontal and vertical lines** and parallel **45 degree lines**.



### Key Terms

**Hardwood** - the wood from a deciduous, broadleaved tree (such as oak, ash, or beech)

**Manufactured Board** – timber sheets which are produced by gluing wood layers or fibres together (such as MDF, Plywood and Chipboard)

**Pyrography** - decorating wood by burning a design on the surface with a heated metallic point

**Renewable** - Inexhaustible and replaceable

**Softwood** - the wood from a conifer (such as pine, fir, or spruce)

**Sustainable** - A sustainable resource can be replaced once used. As a tree is chopped down, many more can be planted to ensure the use of trees can be sustained.

### Tasks

**Task 1:** Learn the tool names and their use.

**Task 2:** Learn the key words and the definition.

**Task 3:** Create 6 questions that can be answered from the information in the focused topic column.

**Task 4:** Draw two tools and write what they are for.

**Task 5:** Create a quiz based on task 1, 2 or 3. Get someone to test you.

**Task 6:** Create a mind map for the information you remember and red pen anything you've forgotten.

**Task 7:** Teach it. Create a task that can be used to teach some of the information from here.

#### To go further:

Introduction to oblique sketches:



More information about natural and manufactured timber:

