



Tool Box

SORT IT AND STORE IT

Booklet Activities

Glossary of Key Terms

| | |
|-------------|--|
| Constraints | |
| Production | |
| Texture | |
| Orthogonal | |
| Isometric | |
| Evaluation | |
| Sequential | |
| Scale | |
| Technique | |
| Adhesive | |

Glossary of Key Terms

| | |
|--------------------|--|
| Properties | |
| Project management | |
| Producing | |
| Built environment | |
| Render | |
| Designed solution | |

Classroom safety.

As a class, develop a set of rules that help keep a class safe.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

GENERAL SAFETY

Word list

accident, apron, avoided, dusted, back, carefully, damaged, hairnet, handle, held, hurt, leather, loose, one, permission, point, run, safety, stay, teacher, tripping, walk, dustpan

1. Wear leather shoes to protect your feet.
2. Wear an apron to protect your clothing.
3. Do not use a machine unless you have passed a safety test for that machine.
4. Do not use a machine unless you have the teacher's permission.
5. Safety zones are marked around machines to show that only one person may use that machine. Everyone else must stay outside the lines.
6. All damaged, blunt or badly adjusted tools must be reported to the teacher.
7. When moving around the room always walk, never run.
8. Whenever there is an accident, it must be reported to the teacher.
9. All tools should be put back in their original position when finished with.
10. Metal filings, scrap metal pieces, saw-dust and wood shavings should all be dusted off the bench with a dustpan and must not be blown.



GENERAL SAFETY

Word list

accident, apron, avoided, dusted, back, carefully, damaged, hairnet, handle, held, hurt, leather, loose, one, permission, point, run, safety, stay, teacher, tripping, walk, dustpan

11.Tools and equipment should not be thrown across the room because they may hurt somebody or be damaged themselves.

12.When using files, a handle is necessary to prevent injury to the user.

13.Hammers with loose heads should not be used.

14.Foolish behaviour and practical jokes should be avoided at all times.

15.Timber should be handled carefully because of its' sharp edges and the chance of splinters.

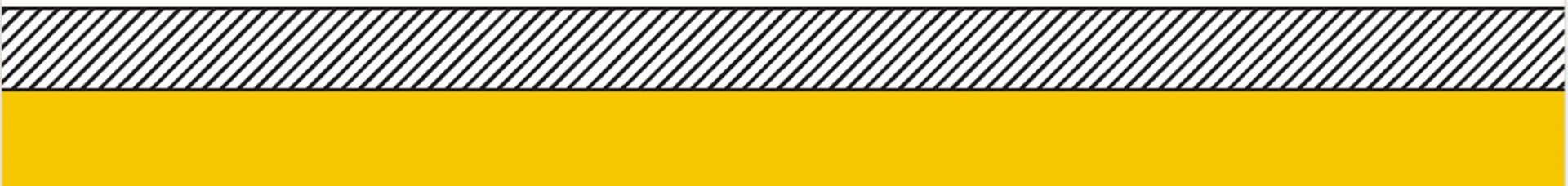
16.Long lengths of timber should be carried point down to avoid injury to others.

17.Long hair must always be tied back or contained in a hairnet when using rotating equipment.

18.When using sharp edged tools (eg. chisels), the work must be held firmly in a vice, or with a cramp instead of by hand.

19.Scrap should be removed from the floor to stop people tripping over it.

20.If you do not use the right tool for a particular purpose, it may become damaged and could cause an accident.



Workshop Tools



Nails



Bench Hook



Disc Sander



Hammer



Pliers



Tape Measure



Screwdriver



Tenon Saw



Screws



Vice



Tri Square



Rule



Drill press






Nail punch

Workshop Scavenger Hunt

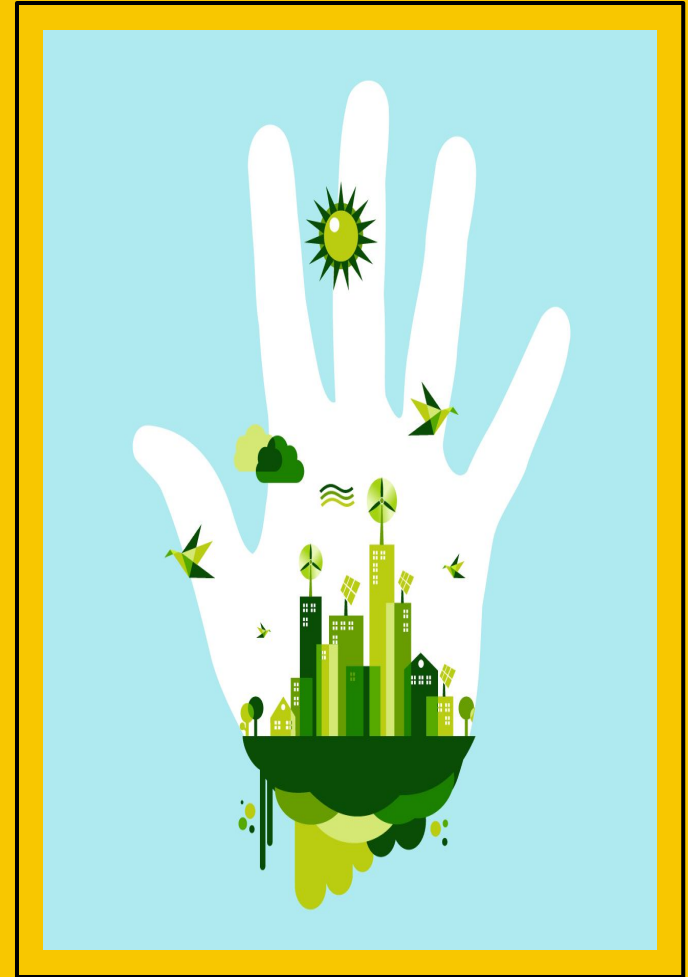
| Item | Check | Item | Check |
|----------------|-------|----------------|-------|
| Drill press | | Dustpans | |
| Disc sander | | Broom | |
| Nail punch | | Tenon saw | |
| Emergency stop | | Safety goggles | |
| Pencils | | Mental ruler | |
| Laser cutter | | PVA glue | |
| Bench hook | | Sand paper | |
| Bench vice | | Paper towel | |
| Aprons | | Try square | |

| Timber | Image | Scientific Name | Hardwood or Softwood? | Use | Colour |
|-------------|--|-----------------|-----------------------|-----|--------|
| Jarrah |  Jarrah | | | | |
| Spotted Gum |  | | | | |
| Blackbutt |  | | | | |
| Brush box |  | | | | |

| Timber | Image | Scientific Name | Hardwood or Softwood? | Use | Colour |
|---------------|--|-----------------|-----------------------|-----|--------|
| Radiata Pine |  | | | | |
| Red Ironbark |  | | | | |
| Tasmanian Oak |  | | | | |
| Victorian Ash |  | | | | |

Sustainability

Complete the mind map below to show the different ways we can address sustainability issues in woodwork.



Case study: Sustainability woodwork



Highlight the main aspects of the text

Sustainability is becoming increasingly important in many industries, and woodworking is no exception. Woodworkers are finding ways to make their craft more environmentally friendly by using sustainable practices and materials. This means using wood from responsibly managed forests, reducing waste, and minimizing the impact on the environment.

One way woodworkers are becoming more sustainable is by using reclaimed wood. This is wood that has been used for something else, like old houses or wine barrels. Using reclaimed wood helps reduce waste and gives old materials a new life. Another way to be more sustainable is to buy wood from local sources. This helps to reduce the carbon footprint of transporting the wood and supports local businesses.

Woodworkers are also finding ways to reduce waste in their workshops. They are carefully planning their projects to minimize the amount of wood they need to cut. They are also using scrap wood and sawdust for other projects, instead of throwing it away. This helps to reduce the amount of wood that ends up in landfills.

Case study: Sustainability woodwork



Using sustainable practices in woodworking is not only good for the environment, but it can also be good for business. Consumers are becoming more aware of the environmental impact of their purchases, and they are looking for products that are made sustainably. By adopting sustainable practices, woodworkers can appeal to these consumers and build a reputation for being environmentally responsible.

In addition to using sustainable practices, woodworkers are also using eco-friendly materials. This includes using non-toxic finishes and paints, which are better for the environment and human health. They are also using recycled materials, such as salvaged barn wood or factory pallets, to create unique and sustainable pieces. By embracing sustainable woodworking practices, woodworkers can help to protect the environment and create beautiful and lasting pieces of art.

| | | |
|--|---|---|
| What is one way woodworkers are becoming more sustainable? | Why is buying wood from local sources a sustainable practice? | What is one way woodworkers are reducing waste in their workshops? |
| <p>A. They are using reclaimed wood from old buildings or barrels.</p> <p>B. They are using only imported wood.</p> <p>C. They are using only new wood.</p> <p>D. They are using only wood from trees that have been planted specifically for woodworking.</p> | <p>A. It helps to reduce the amount of wood that ends up in landfills.</p> <p>B. It helps to reduce the carbon footprint of transporting the wood.</p> <p>C. It helps to ensure that the wood is from responsibly managed forests.</p> <p>D. It helps to ensure that the wood is from old buildings or barrels.</p> | <p>A. They are using only wood from old buildings or barrels.</p> <p>B. They are using only imported wood.</p> <p>C. They are carefully planning their projects to minimize the amount of wood they need to cut.</p> <p>D. They are using only wood from trees that have been planted specifically for woodworking.</p> |

Multiple choice

Short Answer questions



| | | |
|--|--|---|
| What is reclaimed wood and how does it help woodworkers be more sustainable? | How can using non-toxic finishes and paints help woodworkers be more environmentally friendly? | Why are consumers becoming more interested in buying products made sustainably? |
| | | |

Short Answer questions



| | | |
|---|--|---|
| What are two examples of eco-friendly materials that woodworkers are using? | How does using sustainable practices in woodworking benefit both the environment and businesses? | What is one way woodworkers can minimize the amount of wood they need to cut? |
| | | |

Wood has been indispensable to people for thousands of years. Besides providing the raw material for many of the world's largest industries including building, furniture, rubber, paper and food (fruit and nuts) trees also provide life giving oxygen.

1. *Outline the function of each of the following parts of a tree: cambium layer, roots, leaves, bark, medullary rays. Include a diagram.*

Cambium Layer→

Roots→

Leaves→

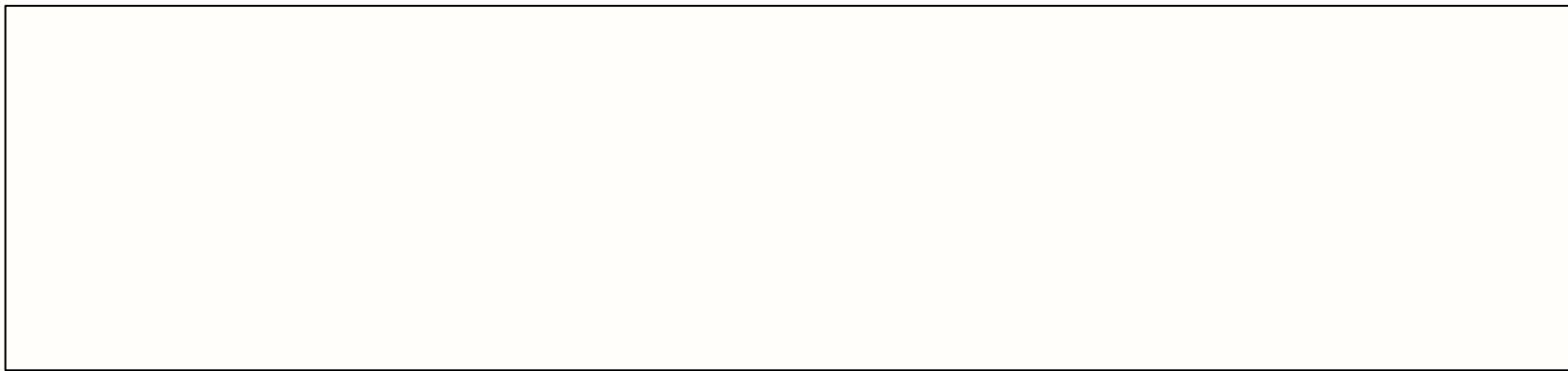
Bark →

Medullary Rays→


Diagram



2. Wood is classed as hardwood and softwood. Describe the properties of each with diagrams.



3. Describe TWO methods of seasoning timber.



4. Describe 3 Timber defects. Image image examples to support your answer.

Image:

Wood Cracks:

Image:

Wood Rot:

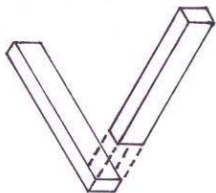
Image:

Knots:

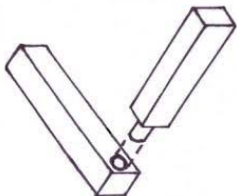
5. *Briefly describe the manufacture of plywood.*

6. *List FIVE uses for plywood*

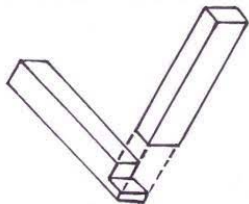
7. Define the following types of joints and include a picture: Butt joint, dowel joint, rebate joint, mitre joint



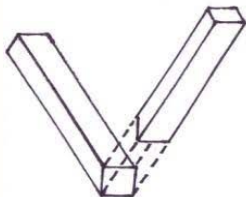
Butt Joint:



Dowel Joint:



Rebate Joint:



Mitre