

Resistant Materials

Year 7 Homework Booklet

Name:

Teacher:

Form:

My teacher is going to test me on all of my homework at the start of each lesson.

For my technical knowledge I need to know:

- How to spell the word correctly
- What the meaning is
- How and where it is used.

Marks

Date	Test number & total mark	My mark	%
	Test 1 - 6 marks		
	Test 2 - 7 marks		
	Test 3 - 8 marks		
	Test 4 – 9 marks		
	Test 5 – 8 marks		
	Test 6 – 20 marks		
	Test 7 – 8 marks		
	Test 8 – 8 marks		
	Test 9 – 7 marks		
	Test 10- 7 marks		
	End of module test – 60 marks		

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How I have performed

What I need to do

Homework 1: Research different types of soft woods and where they originate from.

Research a range of different types of soft woods:

- Include where they originate from
- How they can be finished
- Their properties
- Where they are used

Homework 1:Softwoods

Where does pine originate from?		2
What are the general properties of softwoods?		2
Where are softwoods usually used?		2

Homework 2: Research different types of hard woods and where they originate from.

Research at range of different types of hard woods:

- Include where they originate from
- How they can be finished
- Their properties
- Where they are used

Homework 2: hardwoods

Question	Answer	Marks
What type of trees does hardwood usually originate from?		1
What are the general properties of hardwoods?		2
What are finishes applied to wood and name a suitable finish for sapele?		3
What are properties of oak?		1

Homework 3: Hegarty Maths mm, cm and m and area of square and parallelogram (553 - Counting squares)

<https://hegartymaths.com/metric-units-of-measure>

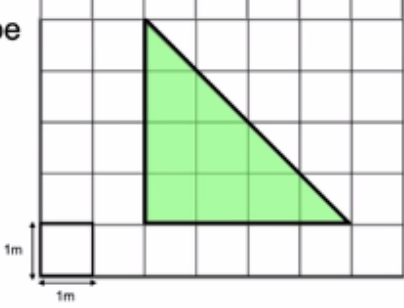
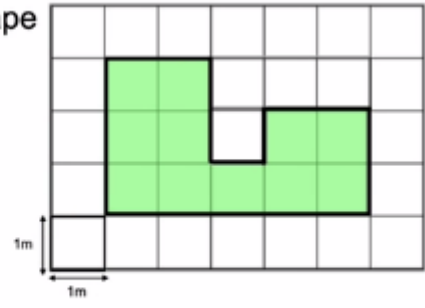
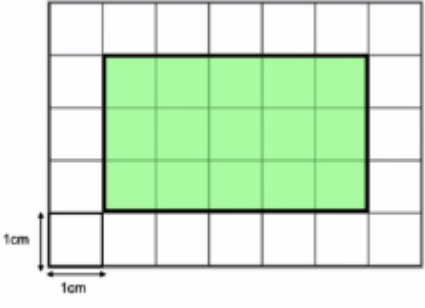
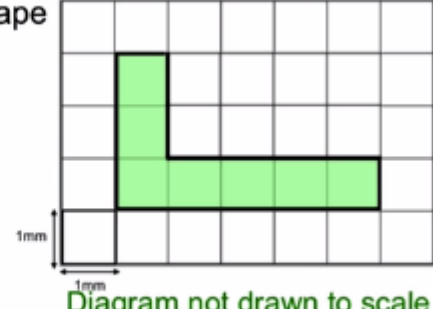
Watch the video, make notes and bring into your next lesson to put in your work book.

Complete the quiz, you must achieve 80%

You will be tested in class too.

Quiz - your teacher will upload your results

Homework 3: Hegarty maths

Question	Answer	Marks
<p>Work out the area of the shaded shape on the metre (m) grid.</p>  <p>Diagram not drawn to scale</p>		2
<p>Work out the area of the shaded shape on the metre (m) grid.</p>  <p>Diagram not drawn to scale</p>		2
<p>Work out the area of the shaded shape on the centimetre (cm) grid.</p>  <p>Diagram not drawn to scale</p>		2
<p>Work out the area of the shaded shape on the millimetre (mm) grid.</p>  <p>Diagram not drawn to scale</p>		2

Homework 4: Research different types of manufactured boards and how they are made.

Research a range of different manufactured boards:

- Include how they are made
- How they can be finished
- Their properties
- Where they are used

Homework 4: Manufactured boards

Question	Answer	Marks
What are manufactured boards made from?		3
Why are veneers applied to manufactured boards?		2
How are laminated boards made?		2
What are the properties of plywood?		2

Homework 5 : Look at the advantages and disadvantages of using manufactured boards compared to natural timbers

Research a range of different manufactured boards:

- Look for advantages of manufactured boards against natural timbers

Home work 5: Manufactured boards advantages and disadvantages

Question	Answer	Marks
<p>What are the advantages of using manufactured boards? Explain why they are advantages compared to natural timbers?</p>		8

Homework 6 : topic test next lesson, revise all topic areas.

Revise:

- Softwoods-properties-use and where they originate from-finishes
- Hardwoods-properties-use and where they originate from-finishes
- Manufactured boards-properties-use- finishes
- Manufactured boards how they are constructed- advantages and disadvantages compared to natural timbers
- **Hegarty Maths** (mm, cm and m and area of square and parallelogram) complete fix up 5

Homework 6 : Topic test

Question	Answer	Marks
What is the difference between a hard wood and soft wood?		2
What are the advantages of using manmade boards?		3
Name two types of softwood?		2
Name two types of hardwood?		2
Name two types of manufactured board?		2
Name two types of finish that can be applied to wood?		2
Why are finishes applied to woods?		2
Name a type of finish that can be applied to manufactured boards?		1
Explain one of the finishing processes associated with manufactured boards?		3
What do you measure squares using?		1
Total		20

Homework 7 : Research advantages and disadvantages of using CAD/CAM compared to traditional techniques.

Research the advantages of using computer aided design:

- Looking at programs that are used
- Advantages
- Disadvantages

Research the advantages and disadvantages of using computer aided manufacture:

- Look for different types of machines
- Advantages
- Disadvantages

Homework 7 : Research advantages and disadvantages of using CAD/CAM compared to traditional techniques.

Question	Answer	Marks
Name different types of CAD software?		1
What does CAD stand for?		1
What does CAM stand for?		1
Give 3 advantages for using CAD/CAM?		3
Give 3 disadvantages for using CAD/CAM?		3

Homework 8 : Research different shaping tools and machines





Research a range of different shaping tools and machines, examples are below:

- **sander**
- **plane**
- **belt sander**
- **planer**
- **thicknesser**

Research:

- What materials they would be used for
- Advantages and disadvantages

Homework 8 : Research different shaping tools and machines

Question	Answer	Marks
<p>What is the name of the tool and what is its use?</p> 		2
<p>What is the name of the tool and what is its use?</p> 		2
<p>What is the name of the tool and what is its use?</p> 		2
<p>What is the name of the tool and what is its use?</p> 		2

Homework 9 : Research health and safety aspects within a technology lesson

Research:

- Different PPE equipment that can be used
- How we can prevent as much dust within the workshop
- Machine maintenance

Homework 9 : Research health and safety aspects within a technology lesson

Question	Answer	Marks
Name two hazards that can occur when using the fret saw?		2
Name two precautions that you can take to prevent the hazards on the fret saw?		2
What can be used to prevent dust within the workshop?		3

Homework 10 : Research different types of saws and revise all topics end of topic test

Revise:

- Softwoods-properties-use and where they originate from-finishes
- Hardwoods-properties-use and where they originate from-finishes
- Manufactured boards-properties-use- finishes
- Manufactured boards how they are constructed- advantages and disadvantages compared to natural timbers
- **Hegarty Maths** (mm, cm and m and area of square and parallelogram) complete fix up 5
- Computer aided manufacture and computer aided design-programs-machines-advantages and disadvantages
- Different shaping tools and machines-**Sander, plane, belt sander, planer, thicknesser**- use-Advantages and disadvantages
- PPE equipment-prevent dust within the workshop-machine maintenance

Research History on saws look at: **Egyptians saws, Mill saws, Band saws and Chain saw**

Write a sentence down explaining about the saw include at least two points from the list below

- Dates
- Materials were used to make the saw
- What material the saw cut
- Where the saw originates

Homework 10 : Egyptians saws, Mill saws, Band saws and Chain saw

Question	Answer	Marks
What type of materials were used to produce the Egyptian saws?		2
How were mill saws driven/powerd?		2
Who was William Newberry?		2
What type of saw was also used for cutting bones?		1