

Write down what you think will be important for the Design Specification of your spatula.

Ergonomics (will it be comfortable to use?)

Aesthetics (does it look good?)

Function (will it work well as a spatula?)

Material (what type of material could be used and why?)

Safety (what could make it safe/unsafe?)



When we design a product we often start with looking at products that do the same job or a job that is similar to the product that we are designing. This research gives us some ideas on designs that work well and also those that do not work well.

As we are designing a spatula/stirring thing I suggest that you look at things used when preparing and cooking food, ie cooking utensils.

Make sure you look at items that have a similar make up to our product. Things with handles- blades, scoops, forks etc. Not things such as cheese graters and food processers.

Your home study task is to find and analyse 5 Existing products. There is space on the next 2 pages for you to put a picture of the product and write down your comments.

I want at least 2 pictures to be hand drawn by you, the rest may be cut from a catalogue or printed from the internet.

Beside the picture write a sentence about each of the design factors listed below.

(E) Ergonomics (will it be comfortable to use? Why?)

(A) Aesthetics (does it look good?)

(F) Function (will it work well as a spatula? Why?)

(M) Material (what type of material do you think it is made from and why?)

(S) Safety (what could make it safe/unsafe?)

An example is shown over the page 

This Home Study sheet is due
to be returned by:

Date _____



Example



Ergonomics -The handle looks well shaped and rounded so it will be comfortable to hold.

Aesthetics - It looks quite plain , I like the way the slots are a triangle with rounded ends

Function- The slots will let grease or other fluids flow through. If I did this on my design I would need to be careful that the material between the slots is not too thin.

Material - It looks like it made from metal and plastic. The plastic handle would stop the heat travelling up from the metal blade and burning the user.

Safety -See Material. I think the handle looks short. The cooks hand would be close to the hot pan.



Empty rounded rectangular box for research notes.

Empty rounded rectangular box for research notes.

Empty rounded rectangular box for research notes.



Draw a scribble filling the whole box, using straight and curved lines.

Remember you must finish where you started from, at the star. Pick out at least 5 shapes that are formed, colour them in to help them stand out and write why you have chosen them. i.e. reminds me of a fish, it is very curvy.



Draw 6 initial ideas and describe its Ergonomics, Aesthetics and Function. Make sure your design fills the full length of the box given.

Ergonomics _____

Aesthetics _____

Function _____

Ergonomics _____

Aesthetics _____

Function _____

Ergonomics _____

Aesthetics _____

Function _____



Ergonomics _____

Aesthetics _____

Function _____

Ergonomics _____

Aesthetics _____

Function _____

Ergonomics _____

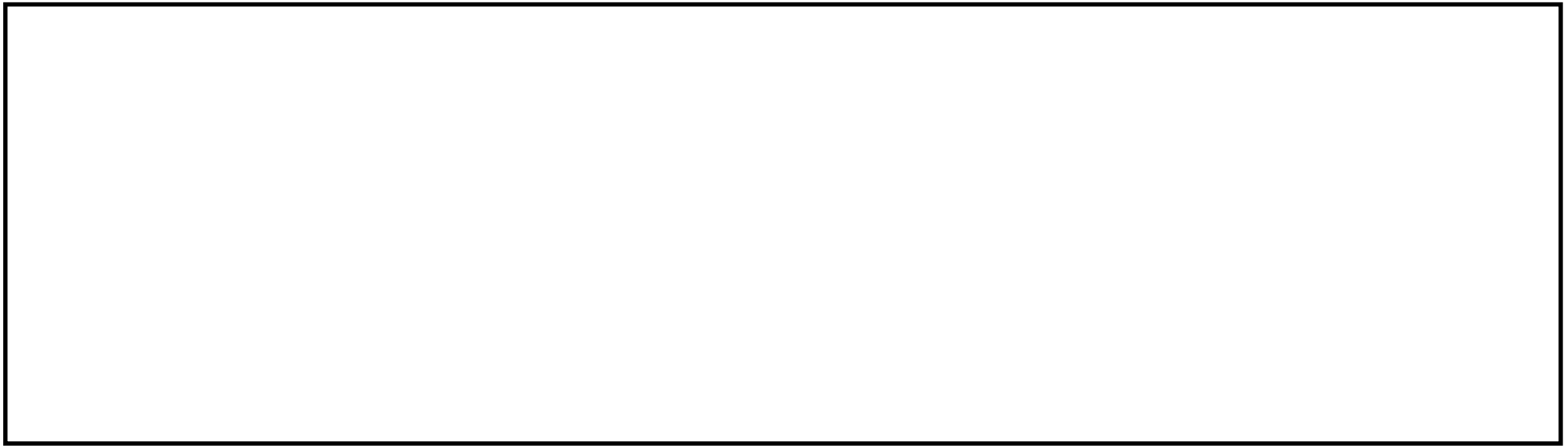
Aesthetics _____

Function _____

Draw 2 DEVELOPED ideas in the boxes given (boxes are actual size of the timber).

On these pages you should draw your 2 designs and write comments below talking about where the idea came from, i.e. Initial idea 1, how and why you have changed it from the initial ideas and if you like the changes at this stage. Use the words function, ergonomics and aesthetics in your comments.

1. If your Design is quite complicated you could simplify it, still keeping the feel of the design but making it easier to produce in the workshop.
2. If your Design is too plain you could add in some other shapes to make it interesting
3. If you like you could join your favourite parts from 2 different designs. Maybe you like the handle of one design and the end of another.



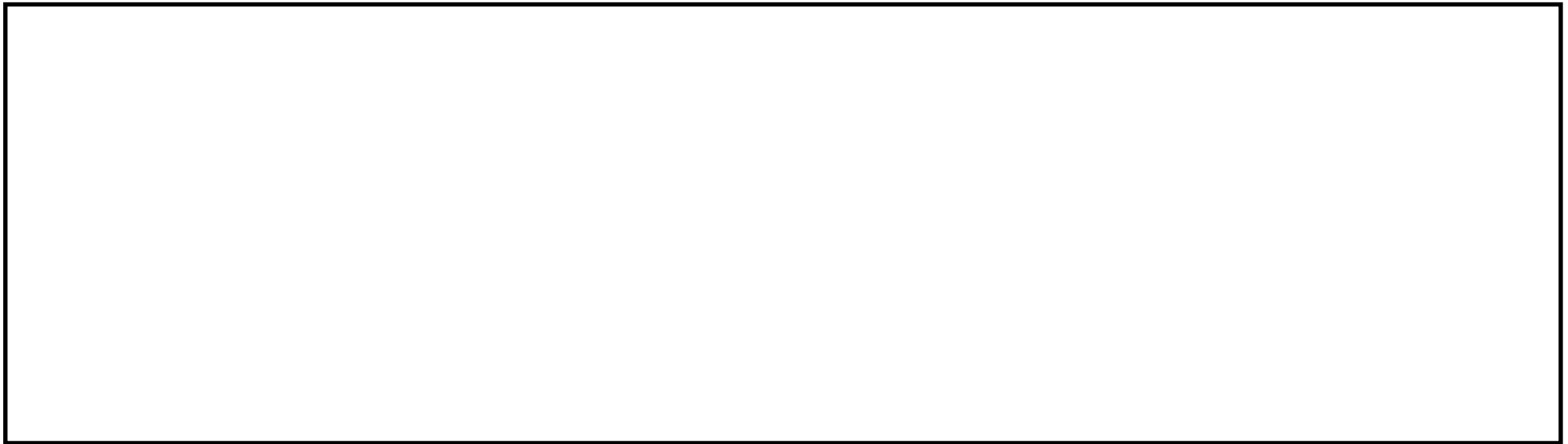
Comments



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Comments



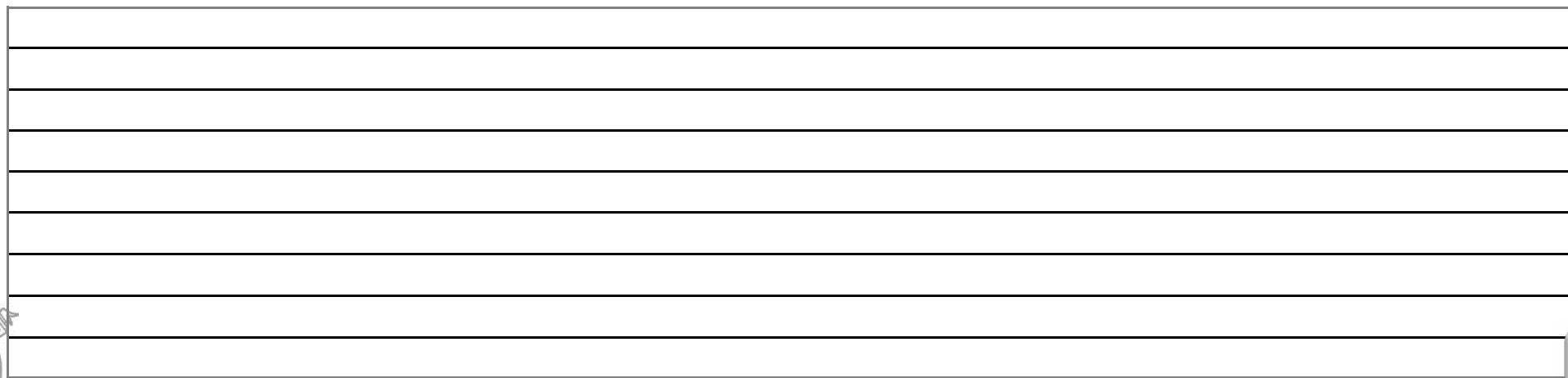
Draw out your final idea in the box below (actual size of the timber). It must be drawn accurately: exact size, symmetrical etc.



Reasons for choice

You will need to write why you have chosen this design above all the others in the folio.

Write out each rule from your Specification and then write under it how your design follows that rule. You should also write a short paragraph beneath with general comments on the choices you have made - did you choose this design because it is your favourite shape? Did you choose it because it was easy to make? Remember use the words **function**, **ergonomics** and **aesthetics** in your comments. You may use the an extra page if necessary.



A Product Evaluation is used for you to look closely at your finished product and think about how much you have achieved. You have been evaluating your spatula throughout this project, from your initial idea to if you were ready to use sand paper.

You will now look at your finished product and evaluate how well you have achieved each step. Write your answers in detail, just "Yes or No" is not enough.

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Construction

- ◆ Did you cut out the shape accurately, did you cut inside the lines, did the teacher need to cut some parts for you on the band saw?

- ◆ Did you drill any holes on your spatula, did you need help?

- ◆ Have you filed the edges smooth to remove saw marks?

- ◆ Did you slope the blade of the spatula on the belt sander, is the slope even?

Finish

- ◆ Have you sanded the product well to remove all file marks and round the edges?

- ◆ Have you removed all pencil marks?

- ◆ Did you decorate the product with the pyrograph,

- ◆ Is the finished product **aesthetically pleasing**? Explain

Function

- ◆ Does the product do the job it was designed to do and is the product **ergonomically correct**? Can it lift and stir things, does it feel comfortable to use? Explain what aspects of the product make it feel comfortable or uncomfortable.



For this task produce an A3 Poster

Think about the layout, work neatly and add colour to help it stand out.

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Use your Sequence of Operations notes that you have written into your workshop booklet to help you with this task.

Your teacher will show you some examples of a sequence of operations
There may also be some on the department website page.

Using an A3 page folded into 8 sections give a detailed description of how you made your project. Use the Fist box for your title and your name.
An example layout shown on the bottom right of this page.

You may want to change the step order depending on how you made your design.
For each step name the tools you used and any tips on technique and safety rules.
You can draw pictures with some notes below or you can do all text if you want.
Pictures could be of the tools you used or showing how to use them.
Work with your skills, more text or drawings depending on your strengths.

The steps to be shown are listed below:

- Step 1 - Mark out shape
- Step 2 - Cut out shape
- Step 3 - Drill holes
- Step 4 - Remove saw marks
- Step 5 - Smooth and shape edges
- Step 6 - Slope front on the belt sander
- Step 7 - Decorate with the Pyrograph

If you have not completed your Spatula yet draw/write about the steps that you have done so far and you will be able to complete the rest later.

Tools/terms you may have used

Coping saw, Tenon saw, Scroll saw
Template
Waste wood
File– flat rough, flat smooth. Round, half round square, 3 square, needle
Pillar drill
Belt sander
Taper
Bench vice
Safety glasses, apron
Teacher may have used the Band saw for you

How I made my Spatula by Harry Potter	Step 1	Step 2	Step 3
	Step 4	Step 5	Step 6
			Step 7

