

Design and Technology

Year 8 Homework



Pupil:

Class:

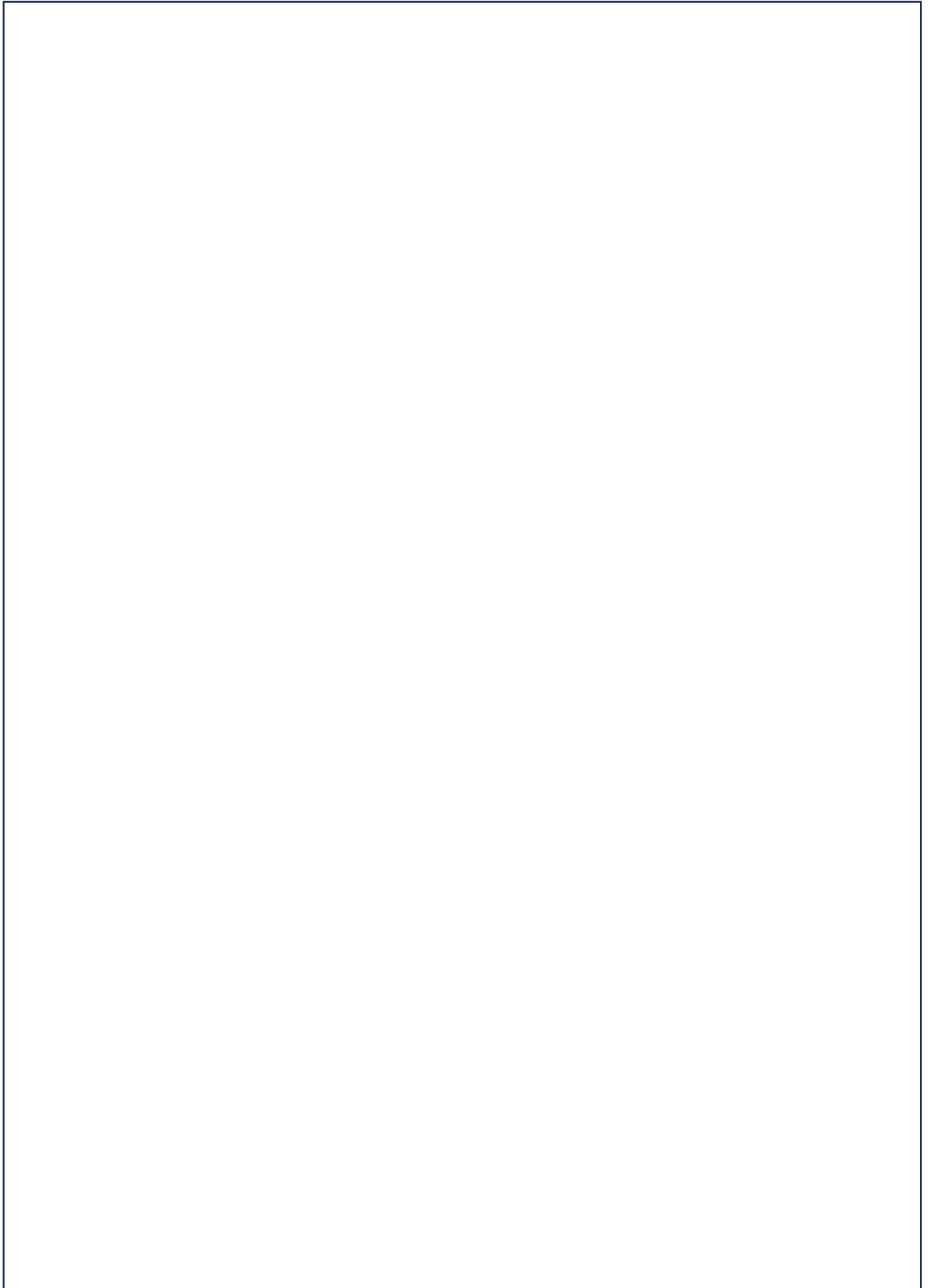
Due Date:



Sequence		Summary
1	Drawing Skills	Draw 4 different garden tools that are used to dig in the garden and describe how each should be used.
2	Product Analysis	Create a product analysis to analyse a garden tool
3	Investigating metals	Use research to create a chart, pamphlet, comic strip, poster or essay in the space to show your research results
4	Risk Assessment	Complete a risk assessment of tasks carried out at home, school or somewhere else.
5	Drawing Skills	Make drawings look like different materials.
6	Wider Impact of Design	Produce a poster, presentation or write an essay that explains the impact of globalisation and the consumer society.
7	Tools and Materials	Identify and label the tools and materials in the pictures.
8	Engineering	Investigate what types of engineering there are and the types of jobs

Week 1: Drawing Skills

Draw 4 different garden tools that are used to dig in the garden and describe how each should be used.

A large, empty rectangular box with a thin black border, occupying most of the page below the instructions. It is intended for the student to draw four different garden tools and describe their uses.

Week 2: Product Analysis

Choose one of the garden tools that you drew last week and analyse the product

What is the products name?

What company produces the product?

Use descriptive language to explain how it might look and feel.

Who would buy this product and why?

What is the product meant to do? Does it do it well? If not, why?

How has the designer considered the environment in the product? If they haven't at all then how could they change it to be better?

What materials is this product made from? Why do you think the designer chose these materials?

Is this product safe to use? Are there any hazards with this product? How could they be fixed?

What makes this product appealing to customers? Why? If it is unappealing, why?

Week 3: Investigating Metals

Investigate metals thinking about the following questions. How do we get metals? Where do they come from? What are they used for? What are some good or bad properties of metals? What examples of products are there that metals are used to make.

Use what you find out about the question and create a chart, pamphlet, comic strip, poster or essay in the space below to show your research results.

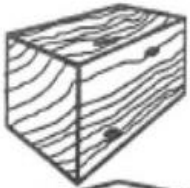
Week 4: Risk Assessment

Complete a risk assessment of tasks carried out at home, school or somewhere else.

What is the task and what are the hazards?					
Who might be harmed and how?					
Severity					
Likelihood					
Risk					
How can you reduce the risk?					

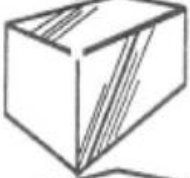
Week 5: Drawing skills

Create 6 drawings of a block of materials and make them look like the material by adding pattern and colour. Use the examples to help you create the texture.



Wood

Add the grain to the shape including the knots.
Colour with various browns and yellow.



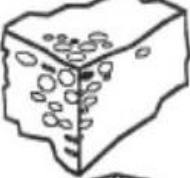
Metal

Add parallel lines of varying width to the surface.
Colour using greys and black.



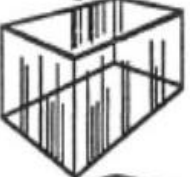
Rubber

Round the corners to soften the shape. Remove the front edges and replace with dots. Colour as required.



Concrete

Roughen the edges of the shape. Use random circles on the surfaces. Colour using blacks and greys.



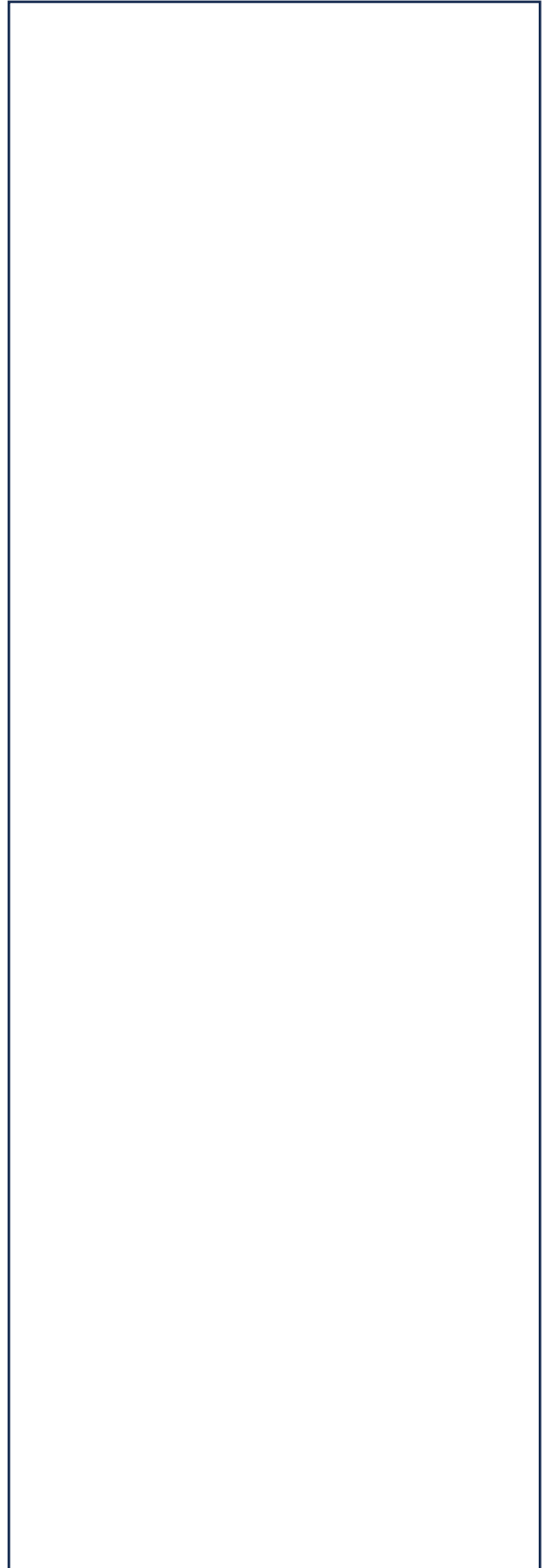
Glass

This shape will be clear so draw in the back edges.
Use light blues to colour.



Plastic

Colour the shape as required. Remove parallel highlights with a ruler and rubber.

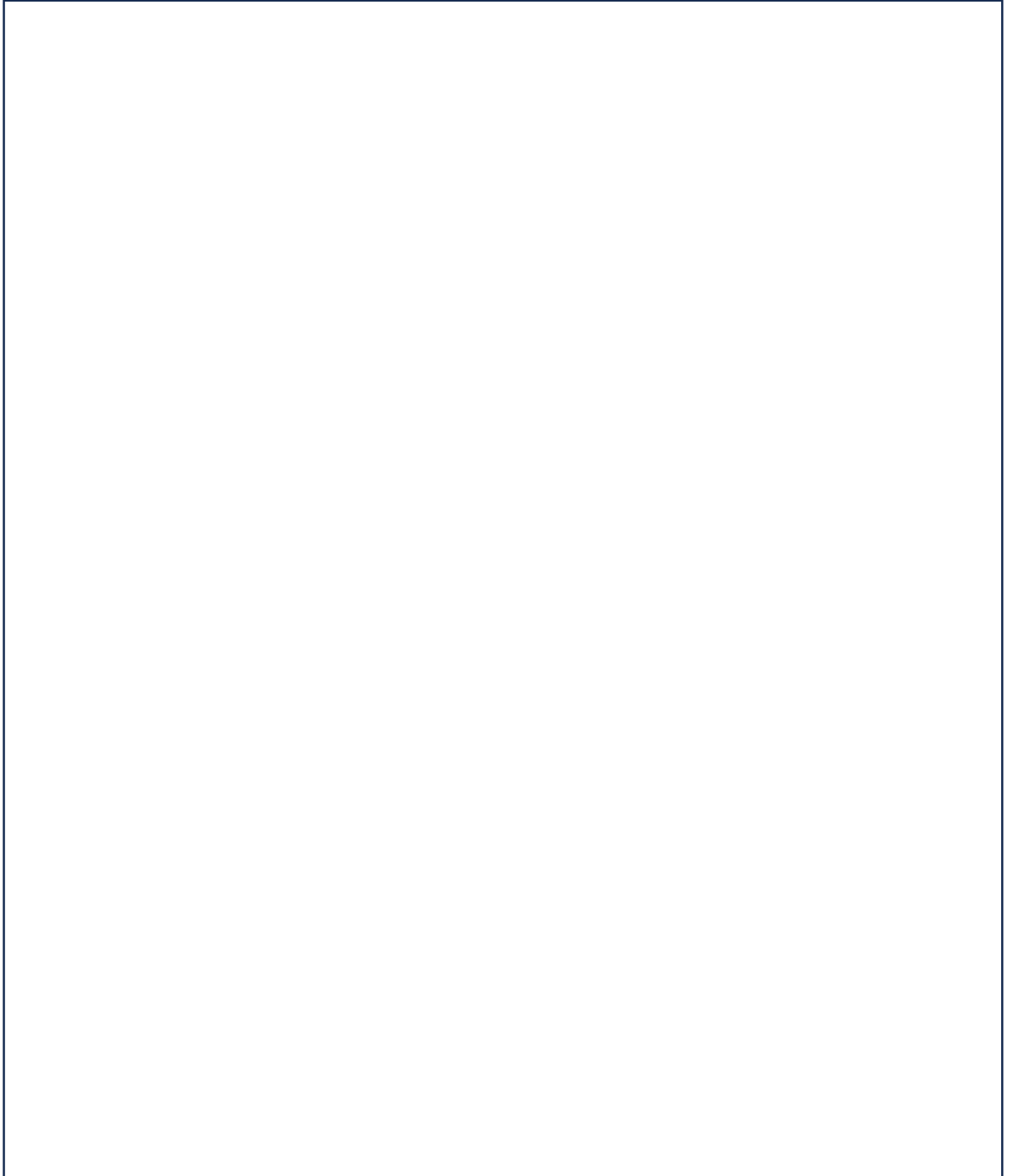


Week 6: Wider Impact of Design

Use the space below to produce a poster, presentation or write an essay that explains the impact of globalisation and the consumer society.

Things to consider:

- What is globalisation?
- How has globalisation affected the world?
- Is it a good thing or a bad thing?
- Should we encourage people to keep buying new things?
- What are the problems with changes in fashion and trends?

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Week 7: Tools and Materials

Use the word bank to identify the tools and materials; label each image with the correct name and describe what you use them for .

Vice, Wet and Dry Paper, Pillar Drill, Tinsnips, Bench Hook, Disk Sander, Scroll Saw, File, cordless drill



Week 8: Engineering

There are 9 main types of engineering these are Aerospace, Automotive, Bio medical, Chemical, Civil, Communication, Electrical, Mechanical and Software engineering. Choose one and investigate what the main activities that are undertaken and the kind of jobs that are in this discipline.

In the box below organise what you have discovered in a way you feel best put that information across to others, to promote that part of engineering