

Engineering Revision

Year 11 Homework Booklet 1

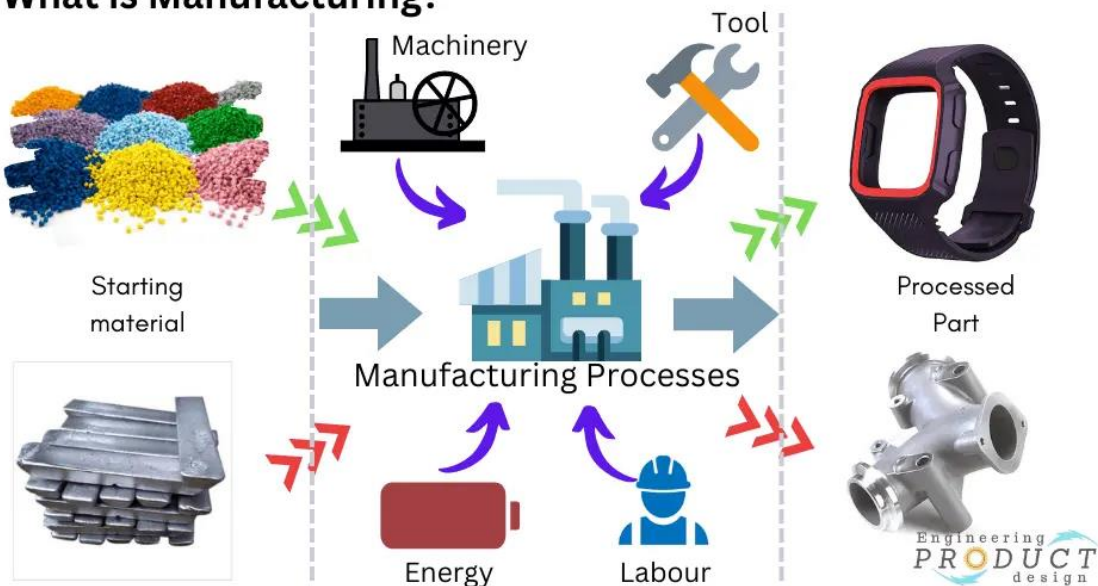
Due Date: _____



Pupil: _____

Class: _____

What is Manufacturing?



Homework should be completed each weekly and handed in to your teacher on the date it is due.

Any issues with the homework must be addressed with your teacher before the due date.

Week	Task title	Summary
1	Research Task	Create a poster that encourages housekeeping in workplace
2	Research Task	Create a poster that encourages engineering technicians to follow housekeeping guidelines at work.
3	Research Task	Write a brief report explaining how drilling is used in different engineering sectors. Give examples and use images.
4	Research Task	Create a short presentation on three different types of saws. You could include videos, health and safety measures, the types of shape and materials that can be cut.
5	Research Task	Find an engineering drawing of a metal toolbox that shows the flat net and the final folded product, identify the fold lines, and cut lines on the diagram.
6	Research Task	Research investment casting, draw a diagram of the process and write a description.
7	Research Task	Sand casting has been used for thousands of years. Research different items made using casting throughout the ages.
8	Research Task	Research soldering and brazing and find ten different products that have been joined using these processes

Home study 1: Workplace information poster



Create a poster that encourages housekeeping in workplace. You can include information about tidying away tools, storing stock, chemicals, PPE, and solvents safely.

You can find images of tidy workshops that show examples of good organisation and write about them.

Home study 2: Design task



Create a poster that encourages engineering technicians to follow housekeeping guidelines at work.

Home study 3: Research task



Write a brief report explaining how drilling is used in different engineering sectors. Give examples and use images.

Think about:

- Biomedical engineering, including robotics, broken bones, teeth.
- Civil engineering, tunnels.
- Automotive engineering, engines.

Home study 4: Presentation



Create a short presentation on three different types of saws. You could include videos, health and safety measures, the types of shape and materials that can be cut.

Home study 5: Research task



Find an engineering drawing of a metal toolbox that shows the flat net and the final folded product, identify the fold lines, and cut lines on the diagram.

Home study 6: Research task



Research investment casting, draw a diagram of the process and write a description.

Collect some images of the types of products produced using the process.

Home study 7: Research task



Sand casting has been used for thousands of years. Research different items made using casting throughout the ages.

Can you summarise how sand casting has shaped the modern world?

Home study 8: Research task



Research soldering and brazing and find ten different products that have been joined using these processes. Write down five interesting things that you have noticed about these products.