

### What is Technology??

Technology is the use of practical and intellectual resources to develop products (technological outcomes).

Addressing needs and find solutions.

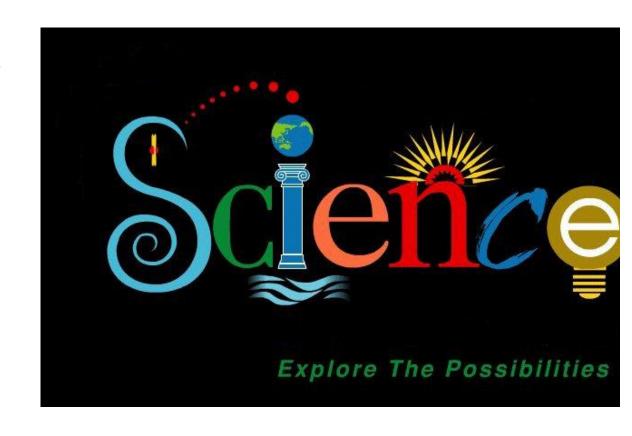
Using Resources To Make an Outcome (Product)

# "Technological product"

 a material or product that exists in the world as a result of human design.

#### It can also be defined as:

The application of science, especially to industrial or commercial objectives.







PROTESTING AGAINST NEW TECHNOLOGY - THE EARLY DAYS

#### Why Study Technology?

It helps us to learn and develop technological literac



It helps us to participate in society as informed citizens.

It gives us access to technology-related careers.

 It teaches us practical skills as we develop models, products, and systems.

# Types of Technology

Soft technology

Sewing and design.





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# Hard technology – woodwork, metalwork, plastics and electronics









## Food technology

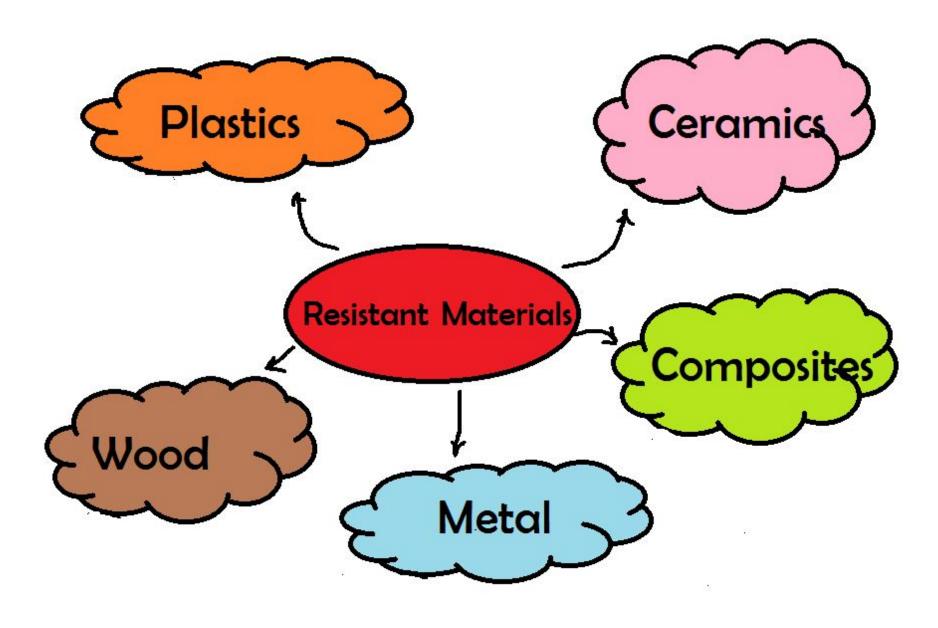








#### Hard technology materials (Resistant Materials)



## Wood (Timber)





Soft wood

**Hard wood** 





#### **Metals**

 Ferrous metals cast iron, steel





Non- Ferrous metals do not contain iron. aluminium, copper, zinc, brass and tin.





## **Plastics**









### **Composite Materials**

Made by combining a reinforcing material such as wood pulp, and a bonding agent, such as glue

The wood pulp is made from the waste from cutting solid wood. MDF and GRP





#### **Ceramics**

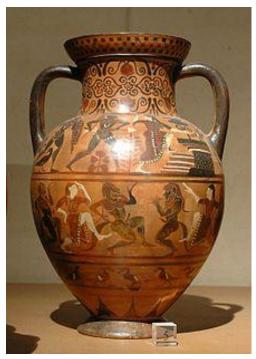
Ceramics are made from clay, sand & feldspar.

These materials are ground to a fine powder, mixed together and fired at high temperatures (700-2000°C).









#### •Steps of making a technological product:

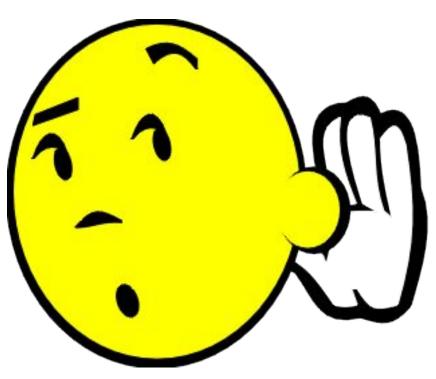
- Address a need
- Use design ideas
- Use planning tools (Long and short term)
- Make a model prototype
- Trial and evaluation
- Decision-making
- Production

# Safety in the workshop... Is it important??



Always listen carefully to the teacher and follow instructions.





2. Do not run in the workshop, you could 'bump' into another pupil and cause an accident.



3. Know where the emergency stop buttons are positioned in the workshop. If you see an accident at the other side of the workshop you can use the emergency stop button to turn off all electrical power to machines.





4. Always wear an apron as it will protect your clothes and hold lose clothing such as ties in place.



5. Wear good strong shoes. training shoes are not suitable.





6. When attempting practical work all stools should be put away.



- 7. Bags should be stored in the bag cupboard not be brought into a workshop as people can trip over them.
- 8. When learning how to use a machine, **listen** very carefully to all the **instructions** given by the teacher. Ask questions, especially if you do not fully understand.
- 9. Do not use a machine if you have not been shown how to operate it safely by the teacher.
- 10. Always be patient, never rush in the workshop.

- 11. Always use a guard when working on a machine.
- 12. Keep hands away from moving/rotating machinery.
- 13. Use hand tools carefully, keeping both hands behind the cutting edge.
- 14. Report any damage to machines/equipment as this could cause an accident.







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