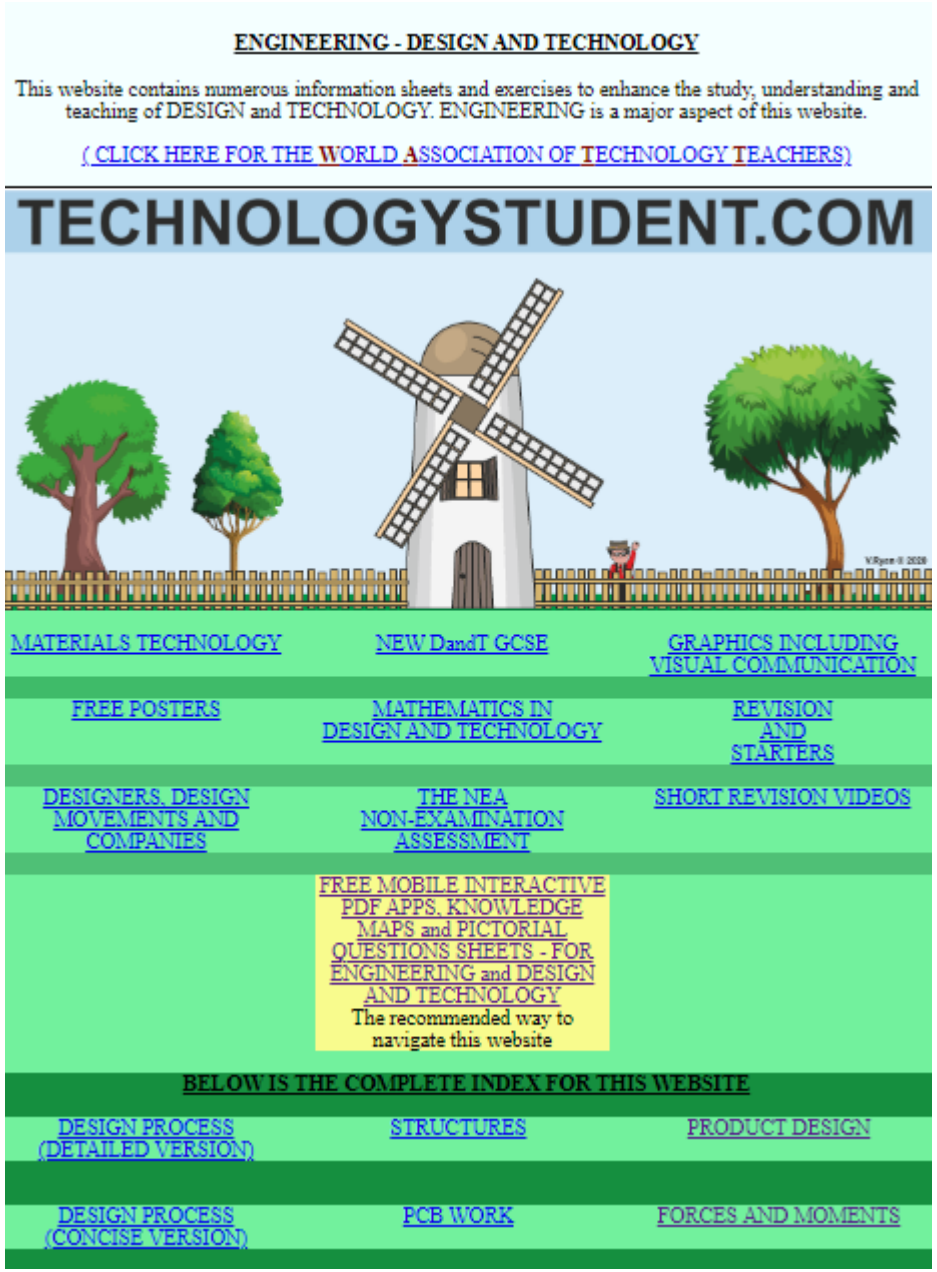
Seneca Study Pack

Click on link below- All sections of D&T theory covered – Easy to use saves progress automatically.

https://app.senecalearning.com/dashboard/class/ff0q16wp6j/assignments/assignment/54aa3eb4-ade0-4b4e-9f29-fcef1cad5ff0



ENGINEERING - DESIGN AND TECHNOLOGY

This website contains numerous information sheets and exercises to enhance the study, understanding and teaching of DESIGN and TECHNOLOGY. ENGINEERING is a major aspect of this website.

(CLICK HERE FOR THE WORLD ASSOCIATION OF TECHNOLOGY TEACHERS)

TECHNOLOGYSTUDENT.COM

MATERIALS TECHNOLOGY | NEW DandT GCSE | GRAPHICS INCLUDING VISUAL COMMUNICATION

FREE POSTERS | MATHEMATICS IN DESIGN AND TECHNOLOGY | REVISION AND STARTERS

DESIGNERS, DESIGN MOVEMENTS AND COMPANIES | THE NEA NON-EXAMINATION ASSESSMENT | SHORT REVISION VIDEOS

FREE MOBILE INTERACTIVE PDF APPS, KNOWLEDGE MAPS and PICTORIAL QUESTIONS SHEETS - FOR ENGINEERING and DESIGN AND TECHNOLOGY
The recommended way to navigate this website

BELOW IS THE COMPLETE INDEX FOR THIS WEBSITE

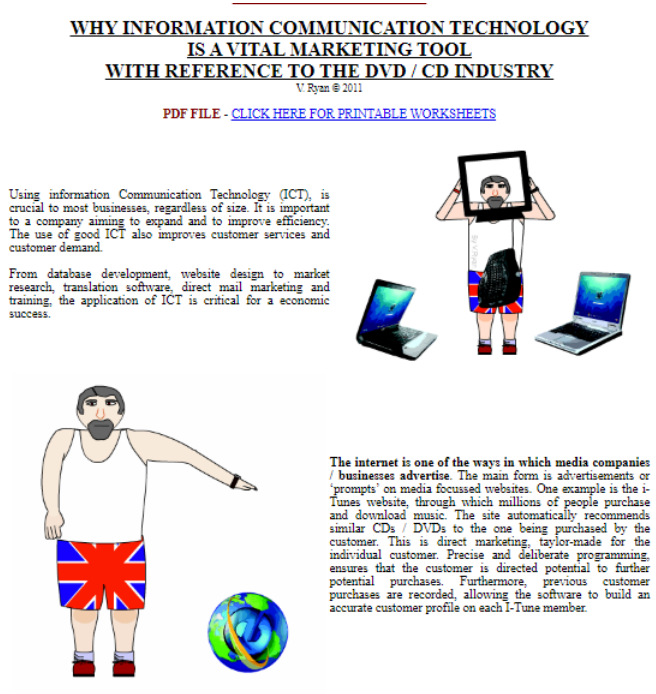
DESIGN PROCESS (DETAILED VERSION) | STRUCTURES | PRODUCT DESIGN

DESIGN PROCESS (CONCISE VERSION) | PCB WORK | FORCES AND MOMENTS

Technology Student

Click on link below- Website dedicated to all things Design Technology based.
Excellent range of resources for both theory and NEA.

https://technologystudent.com/index.htm



WHY INFORMATION COMMUNICATION TECHNOLOGY IS A VITAL MARKETING TOOL WITH REFERENCE TO THE DVD / CD INDUSTRY

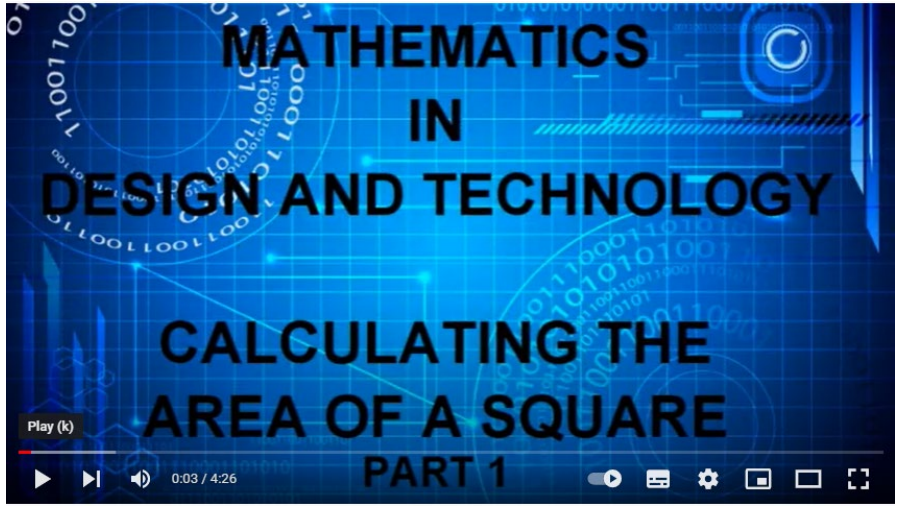
V. Ryan © 2011

PDF FILE - CLICK HERE FOR PRINTABLE WORKSHEETS

Using information Communication Technology (ICT), is crucial to most businesses, regardless of size. It is important to a company aiming to expand and to improve efficiency. The use of good ICT also improves customer services and customer demand.

From database development, website design to market research, translation software, direct mail marketing and training, the application of ICT is critical for a economic success.

The internet is one of the ways in which media companies / businesses advertise. The main form is advertisements or 'prompts' on media focussed websites. One example is the i-Tunes website, through which millions of people purchase and download music. The site automatically recommends similar CDs / DVDs to the one being purchased by the customer. This is direct marketing, taylor-made for the individual customer. Precise and deliberate programming, ensures that the customer is directed potential to further potential purchases. Furthermore, previous customer purchases are recorded, allowing the software to build an accurate customer profile on each I-Tune member.



Maths Study Pack

Click on link below- Part of the Technology Student website. Excellent range of resources for all things maths related with excellent links to videos.

https://technologystudent.com/despro_flsh/new_maths1.html

AREAS

VIDEO - CALCULATING THE AREA OF A SQUARE
PDF FILE - Area of a Square and Associated Examination Questions

VIDEO - CALCULATING THE AREA OF A RECTANGULAR PRISM
PDF FILE - Area of a Rectangle and Associated Examination Questions

VIDEO - CALCULATING THE AREA OF A CIRCLE AND CIRCUMFERENCE
PDF FILE - Area and Circumference of a Circle and Associated Examination Questions

VIDEO - CALCULATING THE AREA OF A TRIANGLE
PDF FILE - Area of a Triangle and Associated Examination Questions

PDF FILE - Moments of Force - Equilibrium (LINKED TO RATIOS)
PDF FILE - Ratios and Associated Examination Questions

VOLUMES

VIDEO - CALCULATING THE VOLUME OF A CUBE
PDF FILE - WORK BOOKLET - Calculating the Volume of a Cube

VIDEO - CALCULATING THE VOLUME OF A RECTANGULAR PRISM
PDF FILE - WORK BOOKLET- Calculating the Volume of a Rectangular Prism

VIDEO - CALCULATING THE VOLUME OF A CYLINDER
PDF FILE - WORKS BOOKLET- Calculating the Volume of a Cylinder

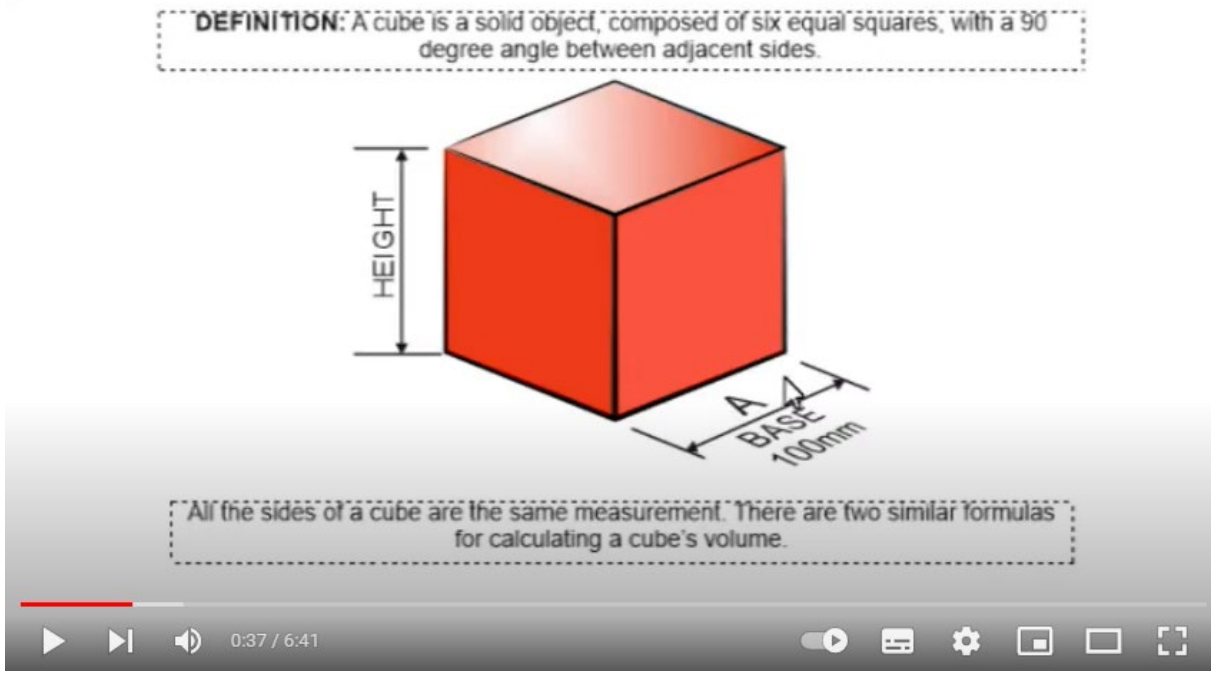
VIDEO - CALCULATING THE VOLUME OF A CONE
PDF FILE - WORK BOOKLET - Calculating the Volume of a Cone

VIDEO - CALCULATING THE VOLUME OF A REGULAR PYRAMID
PDF FILE - Calculating the Volume of a Regular Pyramid

PDF FILE - Volume of a Sphere

MATHEMATICS REVISION CARDS

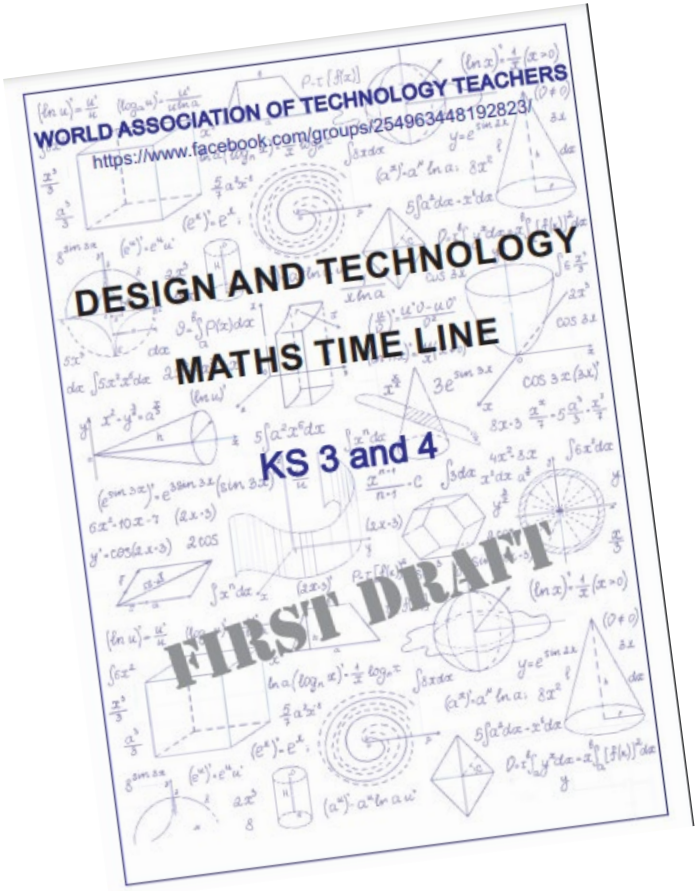
(This sub-section is under development)
Revision Cards - Volumes

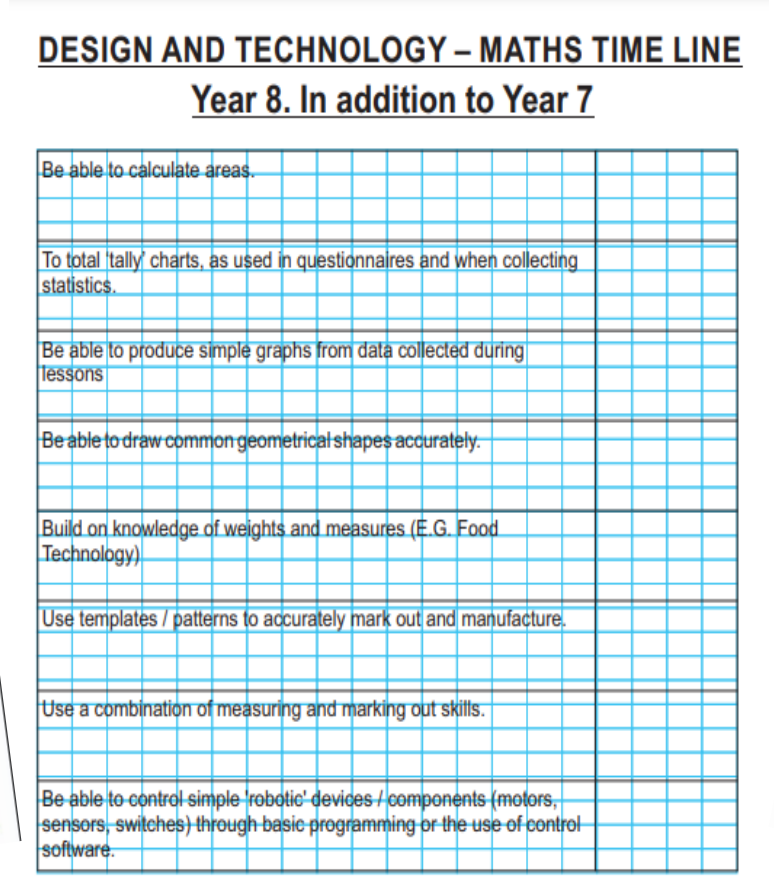


Maths timeline - Study pack

Click on link below- Timeline booklet for KS3/KS4 maths starting with the basics and progressing to more complex equations.

https://technologystudent.com/pdf14/maths_time_line1.pdf

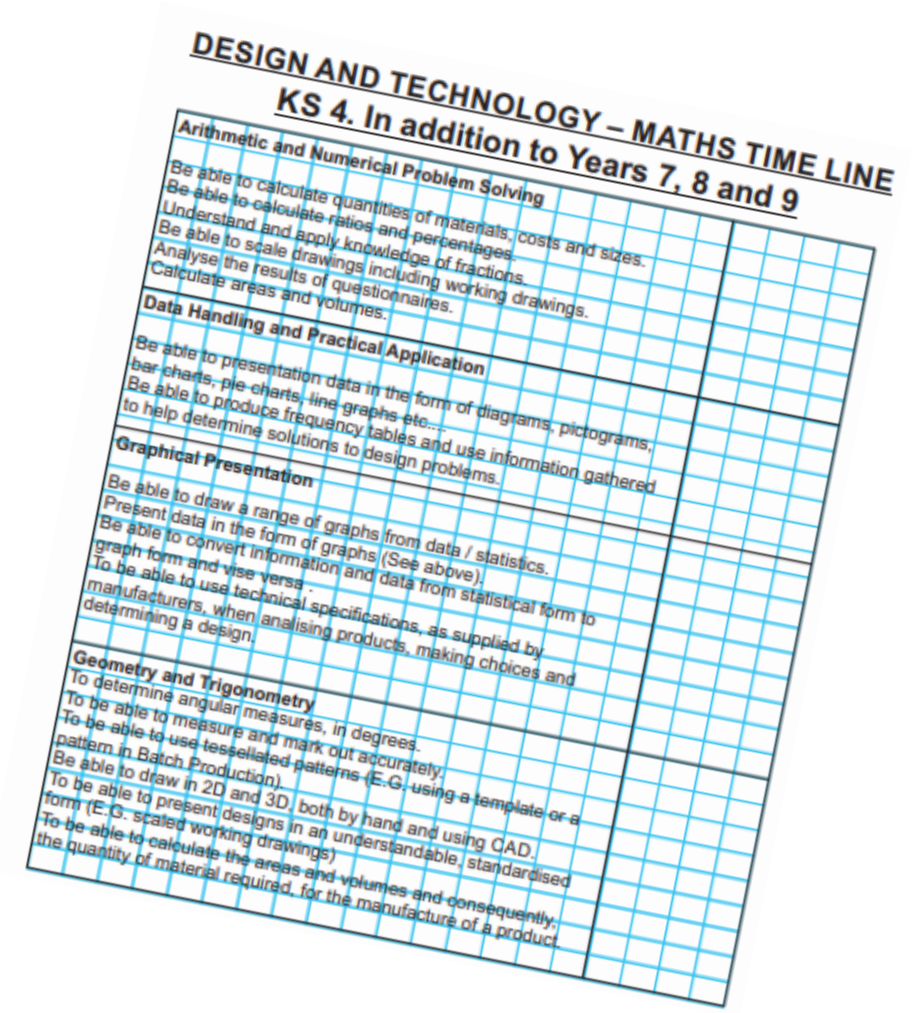




DESIGN AND TECHNOLOGY – MATHS TIME LINE

Year 8. In addition to Year 7

Be able to calculate areas.
To total 'tally' charts, as used in questionnaires and when collecting statistics.
Be able to produce simple graphs from data collected during lessons
Be able to draw common geometrical shapes accurately.
Build on knowledge of weights and measures (E.G. Food Technology)
Use templates / patterns to accurately mark out and manufacture.
Use a combination of measuring and marking out skills.
Be able to control simple 'robotic' devices / components (motors, sensors, switches) through basic programming or the use of control software.



DESIGN AND TECHNOLOGY – MATHS TIME LINE

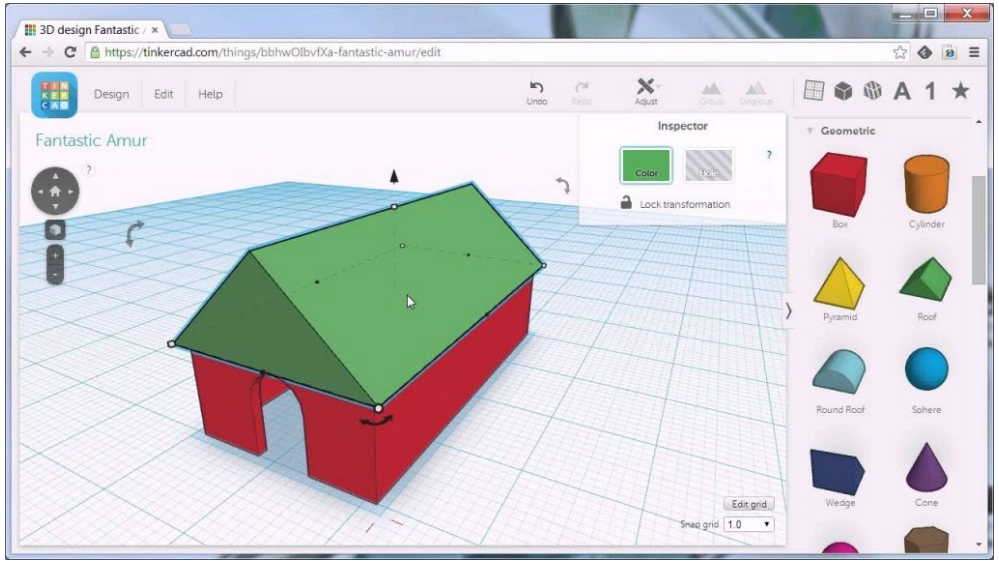
KS 4. In addition to Years 7, 8 and 9

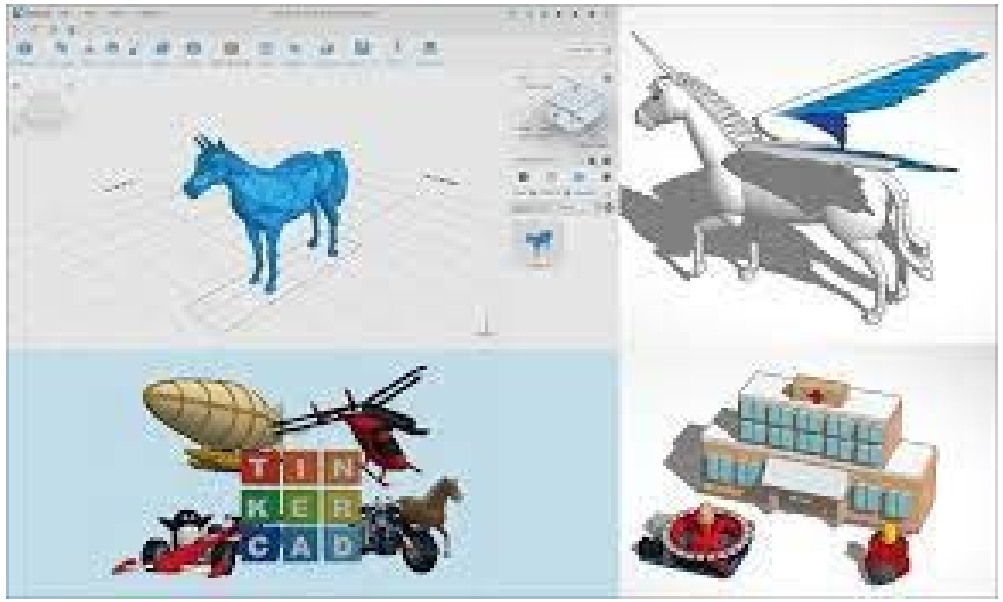
Arithmetic and Numerical Problem Solving	Be able to calculate quantities of materials, costs and sizes. Be able to calculate ratios and percentages. Understand and apply knowledge of fractions. Be able to scale drawings including working drawings. Analyse the results of questionnaires. Calculate areas and volumes.
Data Handling and Practical Application	Be able to presentation data in the form of diagrams, pictograms, bar charts, pie charts, line graphs etc... Be able to produce frequency tables and use information gathered to help determine solutions to design problems.
Graphical Presentation	Be able to draw a range of graphs from data / statistics. Present data in the form of graphs (See above). Be able to convert information and data from statistical form to graph form and vise versa . To be able to use technical specifications, as supplied by manufacturers, when analising products, making choices and determining a design.
Geometry and Trigonometry	To determine angular measures, in degrees. To be able to measure and mark out accurately. To be able to use tessellated patterns (E.G. using a template or a pattern in Batch Production). Be able to draw in 2D and 3D, both by hand and using CAD. To be able to present designs in an understandable, standardised form (E.G. scaled working drawings) To be able to calculate the areas and volumes and consequently, the quantity of material required, for the manufacture of a product.

CAD Skills

Click on link below- Tinkercad is a free-of-charge, online 3D modelling program that runs in a web browser.
popular platform for creating models for 3D printing as well as an entry-level introduction to constructive solid geometry.
Great range of video resources that can be accessed.

- https://www.tinkercad.com/





AUTODESK
Tinkercad

CAD skills - Google Sketch-up

Free 3D design software that makes 3D modelling for everyone, supported by library of how to videos

- https://www.sketchup.com/plans-and-pricing/sketchup-free