



**KING EDWARD VI  
CAMP HILL  
SCHOOL FOR BOYS**

# Supercurricular Design & Technology

Item	Qty	Part Number	Description	Material
1	1	Block A	Rectangle	Douglas Fir
2	1	Block B	Circle Shape	Douglas Fir
3	1	Block C	L-Shape	Douglas Fir

3D Puzzle

## Design

### Initial Ideas #1

Number 1: - 2 wooden and table top. - 2 wooden and table top. - 2 wooden and table top. - 2 wooden and table top.

Number 2: - 2 wooden and table top. - 2 wooden and table top. - 2 wooden and table top. - 2 wooden and table top.

Number 3: - 2 wooden and table top. - 2 wooden and table top. - 2 wooden and table top. - 2 wooden and table top.

## Study Websites

Basic concepts put over easily - [www.technologystudent.com](http://www.technologystudent.com)

BBC bitesize - D&T - AQA - [www.bbc.co.uk/bitesize/examspecs/zby2bdm](http://www.bbc.co.uk/bitesize/examspecs/zby2bdm)

Focus learning - Great animations and information for learning

- <https://www.focuselearning.co.uk/u/4666/hmpjraotFtiobFiCxaaesCDwCbxEhviob>

## Councils

Design council - <https://www.designcouncil.org.uk/>

The Institution of Mechanical Engineers - <https://www.imeche.org/>

The Institute of Electrical and Electronics Engineers - <https://www.ieee.org/>

The Institution of Civil Engineers - <https://www.ice.org.uk/>

## Organisations

Arkwright Engineering Scholarship - <https://www.arkwright.org.uk/>

Smallpeice Trust (Free and Cost courses) - <https://www.smallpeicetrust.org.uk/events>

Engineering Development Trust - <https://www.etrust.org.uk/young-people>

Year in Industry - <https://www.etrust.org.uk/the-year-in-industry>

Industrial Cadet Gold Project - <https://www.etrust.org.uk/ic-gold-readmore>

## Museums

Design museum - <https://designmuseum.org/>

V&A (Victoria & Albert Museum) - <https://www.vam.ac.uk/>

BMAG (Birmingham Museum & Art Gallery)

- <https://www.birminghammuseums.org.uk/bmag/>

Thinktank Birmingham Science Museum -

<https://www.birminghammuseums.org.uk/thinktank>

Museum of the Jewellery Quarter - <https://www.birminghammuseums.org.uk/jewellery>

The National Space Centre - <https://spacecentre.co.uk/>

The Mechanical Art & Design Museum - <https://themadmuseum.co.uk/>

The Coventry Watch Museum - <https://www.coventrywatchmuseum.co.uk/>

Coventry Transport Museum - <https://www.transport-museum.com/>

The British Motor Museum - <https://www.britishmotormuseum.co.uk/>

London Transport Museum - <https://www.ltmuseum.co.uk/>

The Silverstone Interactive Museum - <https://www.silverstonemuseum.co.uk/>

## Blogs and Audio recordings

Interesting Engineering - <https://interestingengineering.com/>

They made our world - <https://www.bbc.co.uk/sounds/brand/p033817j>

30 Animals that made us smarter - <https://www.bbc.co.uk/sounds/brand/w13xttw7>

People Fixing The World - <https://www.bbc.co.uk/sounds/brand/p04d42vf>

The design dimension - <https://www.bbc.co.uk/sounds/brand/b04t6nbr>

Designing a world for everyone - <https://www.bbc.co.uk/programmes/m000bcnf>

50 Best Design blogs - <https://www.shillingtoneducation.com/blog/50-best-design-blogs/>

15 Best Mechanical Engineering Blogs - <https://geniuslabgear.com/blogs/for-scientists/best-mechanical-engineering-blogs>

## Social media channels

### YouTube

How to sketch like an product designer - <https://youtu.be/iVy0qGqmKFU>

Industrial Design 101 - Beginning any project - [https://youtu.be/BlubY5yL\\_rA](https://youtu.be/BlubY5yL_rA)

Sketch a day - <https://www.youtube.com/c/sketchadaydotcom>

Marker drawing of a Camera - <https://youtu.be/sieVSypwZCE>

Interesting Engineering - <https://www.youtube.com/c/Interestingengineeringofficial/featured>

TED Talks

- The Design of useful things (30+ talks) - [https://www.youtube.com/playlist?list=PLOGi5-fAu8bEQFq\\_0nUqXg5OTzPf4rTgM](https://www.youtube.com/playlist?list=PLOGi5-fAu8bEQFq_0nUqXg5OTzPf4rTgM)
- Design for all 5 senses - <https://www.youtube.com/watch?v=N6wjC0sxD2o>
- The first secret of great design - <https://www.youtube.com/watch?v=9uOMectkCCs>

Arduino - <https://www.youtube.com/hashtag/arduino>

Intro to Arduino - <https://www.youtube.com/watch?v=1o6Q2QzmFvA>

Top 20 Arduino Projects - [https://www.youtube.com/watch?v=GwYuixn\\_9Yg](https://www.youtube.com/watch?v=GwYuixn_9Yg)

### Instagram

Follow these -

- thedesignw0rld
- design.workout
- anne goodman design
- Weekly Design Challenge
- Sketchadaydotcom
- Render weekly

### **Skills / Software**

#### CAD

- All Autodesk software is free if you have an academic email account, <https://www.autodesk.com/education/home> and then click on “Get products” then “Get Started” and then “Create Account”. There are almost 50 Industry standard software for free but check out the following -
  - Autodesk Fusion 360 - 3D software for creating, testing, detailing and making your designs
    - It has an online editor - <https://fusion.online.autodesk.com/>
  - Autodesk CFD - Excellent and simple Fluid Dynamics (Can be used as a Wind Tunnel)
  - TinkerCAD - Is a super simple 3D modelling software **BUT** has an excellent electronics simulation software built in - <https://www.tinkercad.com/>
  - MAYA - 3D animation, modelling, simulation, and rendering software for film, games, and TV
- Techsoft 2D Design v3 - Download a free copy for home - <https://www.techsoft.co.uk/products/software/techsoft-design-v3-download> ask a DT teacher for the licence code
- Siemens Solidedge - [https://www.plm.automation.siemens.com/plmapp/education/solid-edge/en\\_us/free-software/student](https://www.plm.automation.siemens.com/plmapp/education/solid-edge/en_us/free-software/student) Free 3D CAD software for students.

#### Microcontrollers

- Arduino - <https://www.arduino.cc/>
- Raspberry Pi - <https://projects.raspberrypi.org/en>
- Microbit - <https://microbit.org/>