

# Everything you need to know about Design and Technology at Nene Park Academy



Ms Othen  
Head of Design Technology

## Welcome KS3 Design & Technology



Mr Foster  
Design Technology Teacher

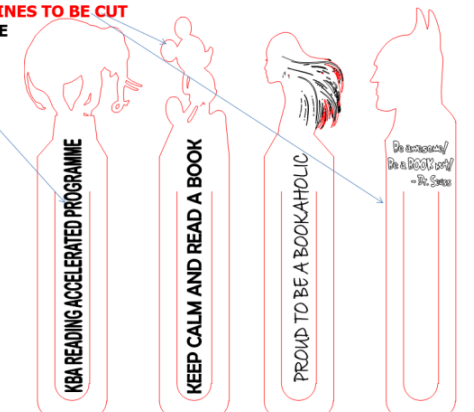
# To succeed in Design Technology there are five skills that you must master as you progress through Key Stage 3.

## It's your guide to becoming a master designer!

Key Stage 3 Design and Technology	Curriculum aims	Curriculum content
Year 7	<p>Our academies offer a high-quality Design and Technology Curriculum that inspires all students to succeed and excel in a range of design and make activities utilising traditional disciplines and modern, technologically rich approaches.</p> <p>A Design and Technology student will:</p> <ul style="list-style-type: none"> <li>▪ Develop competency and confidence in a broad range of design and make activities</li> <li>▪ Develop a sound understanding of the expectations and practices that are required in a workshop setting</li> <li>▪ Explore and understand material characteristics and applications</li> <li>▪ Seek out solutions to set problems and develop independence when creating and producing work of their own</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Communication</b> To be able to communicate ideas verbally, in written form, in visual form, (sketching, drawing, including formal), working with models, presentation techniques or through 3-dimensional outcomes sufficient enough for a third party to be able to interpret and understand the idea and the thinking behind it.</li> <li>• <b>Knowledge</b> To develop and extend a deeper understanding of the design and technology discipline that they are working within. This included, design, make skills, applications and processes, material knowledge and performance characteristics.</li> <li>• <b>Designing</b> To be able to draw upon a variety of different design processes (working to contexts, analysing user needs and wants, explore-create-evaluate / design-test-refine, using inspirational sources to develop creative outcomes, analysing the work of others, problem solving, improving existing products, designing our tomorrows, formal methods of communication) that enables the student to independently communicate and present their work clearly and accurately.</li> </ul>
Year 8	<p>Teaching will develop confidence, understanding and an interest in students to become more aware of the role design and technology plays both in and out of school.</p> <p>Students in <b>Year 8</b> will grow more competent, confident and expert in their techniques, and apply them to a range of design and technology briefs. They should be able to interpret a brief and understand the problem, providing potential solutions that draw upon their growing knowledge.</p>	<ul style="list-style-type: none"> <li>• <b>Practical</b> To be able to perform safely a range of complex skills with an element of precision, accuracy and control. Using the correct tools and equipment safely, accurately</li> <li>• <b>Evaluation</b> To be able to evaluate the work that has been completed and recognise strengths and weaknesses. Suggest ways to improve and develop.</li> </ul>



RED SHOWS THE LINES TO BE CUT  
BLACK TO ENGRAVE



# Equipment you will need for your DT lessons

EVERY LESSON YOU WILL BE EXPECTED TO HAVE YOUR BASIC EQUIPMENT.



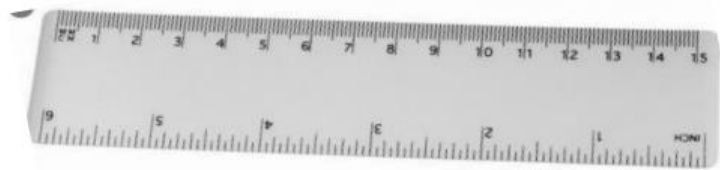
Blue or black pens to complete your written work.



A pencil for your diagrams.



A green pen to mark your work and make corrections.



A ruler to underline date and titles, also to draw neat diagrams.

Desirable equipment to have. These will help with your drawings and designs.



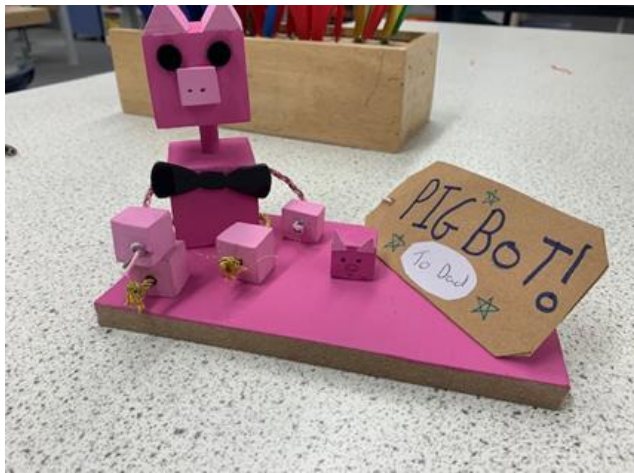
All of this equipment can be found in your local supermarket or online.



## What to wear in the Workshop

- You will be given an apron
- Your tie must be tucked behind the apron or in your shirt
- You will be given safety goggles to wear
- All long hair must be tied back
- Coats and bags are required to be stored in the boxes provided in the workshop.



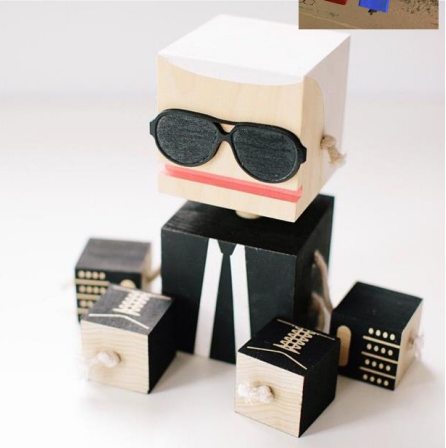


# What will I learn in Design and Technology?

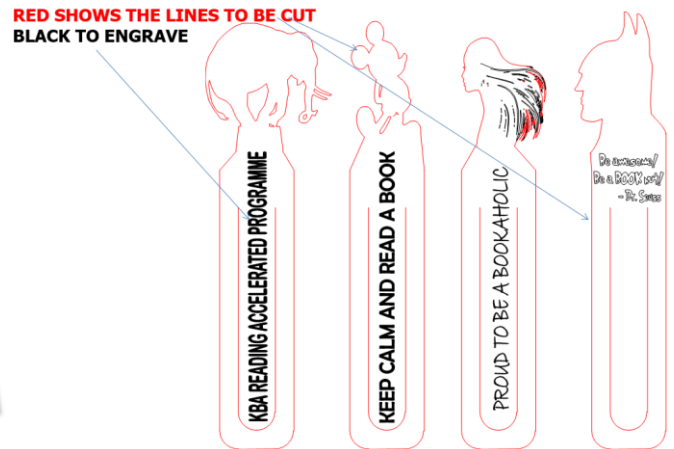
- You will learn first how to use all DT rooms safely (Workshops C12 and C14). This is very important as you will be using equipment that takes a lot of focus and care, so health and safety is very important.
- You will be taught once a week either by Ms Othen or Mr Foster and throughout the year you will complete a variety of projects that use different materials and skills.



# What Projects?



KS3 Design and Technology	
Year 7	Year 8
BlockBot Project	Architecture Project
CAD/CAM Polypropylene Project	Bottle Opener
Key Ring Project	Maze Game
Door Stop	Maze Game Packaging
Chocolate Packaging	CAD/CAM Project



## 5 ways I can help my son/daughter

- 1 Encourage your child to join one of the extracurricular activities ran within the department.
- 2 Encourage your child to enter school and national design competitions.
- 3 Look at objects to see what materials they are made from and how they might be manufactured.
- 4 Talk to them about their progress and attainment.
- 5 Provide basic art materials and equipment (set of art pencils, colouring pencils, fine liner).

## How can parents support their child's learning?

- Parents can support their child through general discussion concerning projects; offering personal points of view and opinions is very useful to help students reflect on their ideas. Help may be given to assist students in any aspect of research, analysis, planning and evaluating project work.
- Ask what subject areas they like in Design and Technology? Ask them how something works? Why is it designed like that? What would happen if they didn't use that particular design? Encourage problem solving and making activities.
- [BBC Bitesize DT Stem Technology student](#)