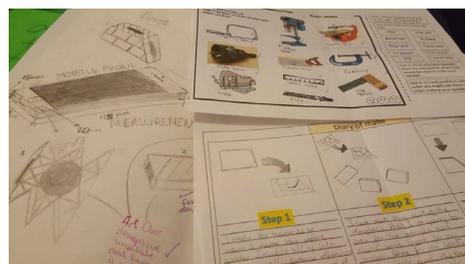## Design

The Design curriculum is designed to allow students to explore topics in creative ways using a wide variety of materials, techniques and processes. Throughout a student's creative journey and SOL designed to sequence work within the rotation and linking throughout the design subjects they will explore the themes through visual, practical experimentation and written research. Students will then use this to develop ideas to be able to produce final products/ outcomes.

How is the curriculum planned?

Throughout KS3 students are taught skills in Art, Textiles, 3D Design Graphics and Food. Within these subjects students learn about different art forms and also learn about the application of applied subjects such as Food, 3D Design, Textiles and Graphics. These applied subjects allow students to build vital skills for life. Students then choose a 'creative subject' at KS4 that include all of the design subjects alongside Performance subjects and PE.

All students must understand the three main processes in Design and use them to produce work in years 7&8. These ask the students to learn how to explore and develop ideas. Then be able to refine the processes and use of materials and equipment to be able to 'Make' a final outcome. Finally, students will learn how to review, modify and evaluate the work as it is produced. Students projects and assessment become progressively more demanding as the work through years 7&8 to allow them to access the more demanding work at KS4 (see appendix 1)

At KS4 students choose to specialise in one or more of the following areas

● Food
● Fine Art, 3d Design, Graphics, Textiles
● Photography

Students will need to recall skills and knowledge acquired in year 7 and 8 for each of these specialisms to be successful at GCSE. Skills applied in these areas also link to PE, Maths and Science. Planning for specific lessons that link to other subjects allows students to make connections and apply knowledge across the curriculum. For example, the theory of sound links to the passive speaker project and the Eatwell guide links closely to PE and Science. The application of Maths in Design links through all subjects but is more explicit in Food and 3D design. Planning of these specific tasks and topics are planned alongside staff from these subjects' areas. Within lessons staff make references to career paths for students and make connections between the tasks and specific jobs. For example, the understanding of the colour wheel is not just for artists but also painter and decorators, architects and interior designers. Displays show career opportunities and information regarding careers is included in the design department option process.

Cultural capital is built within Design through the involvement in planning and delivering sessions on PD days for example Asia Day, Africa Day and Design Day. During KS4 students are provided with artist workshops and visits from local food specialists. They also have the opportunity to visit colleges and the University of Portsmouth alongside the opportunity for trips to museums. Within the curriculum cultural links are made when researching art, artists, cultures and products and it is vital for the development of ideas.

How is the curriculum delivered/taught?

Staff plan using the mastery approach expecting students to build practical skills alongside knowledge and applying these to make progress throughout the rotations in years 7&8. Interleaving is vital throughout year 7&8 as students work through the rotations ensuring that students revisit the key skills of research, exploration, experimentation, making, evaluation and adapt. All subjects need to ensure that vital key terms are revisited throughout the rotations (see appendix 2) to allow students to better memorise these tasks and skills within the subjects. At KS4 key skills and terms from KS3 need to be revisited and re-taught more in depth throughout the courses through starter activities and tasks. Themes and topics allow students to use a variety of different materials and ingredients.

Other pedagogical approaches such as flipped learning using IL so students can research information allowing staff to build on this and allow for deeper understanding to be explored in lesson.

A consistent use of academic language and technical language in lesson is used by staff, and students to develop a deeper understanding of the subjects and create more meaningful written responses in Controlled Assessments, Non Examined Assessments and Exams (in the case of food). Staff ensure that all new or subject specific words are clearly understood, drawing attention to them, discussing their meanings and linking them to other similar words. Glossaries based on topics at KS4 are used and KS3 glossaries are used in each rotation for subject specific language. Reading in our areas is for information and instruction; what students do with the information gained is key as they need to know what to include and what to omit.

Metacognition is encouraged and explained to students while tasks are being demonstrated and explanations of how to 'think' through processes. Knowledge organisers are used when students are collecting and retrieving information to help them prepare for the next step or to summarise an activity, task or theme that has been completed.

The use of questioning in lessons allows for deeper thinking in relation to the themes and topics, and rigorous evaluations allow students to modify and improve work as it progresses and see the value in evaluations after they are written. Peer assisted learning in lesson develops student's creativity and verbal group critiques of work and peer assessment improves students' understanding of how to move forward.

All students are challenged through rigorous learning objectives allowing staff to 'teach to the top', and then scaffold tasks to allow all students to flourish whilst still being engaged and motivated. Providing elements of choice for students and allowing for rigorous personal responses allows for differentiation and also challenge. Not every student will want to work the same way with the same processes or with the same stimulus. Modelling and doing practical demonstrations of tasks is often vital along with exemplary work that links to the success criteria.

How is the curriculum assessed?

In years 7&8 students are assessed in two ways. One using the KPIs of the skills that transfer throughout all of the design subjects and also each rotation students are provided with KPIs that are subject specific. The assessment strands are based on 'Research', 'Making', and 'Evaluation'. These are used for summative and formative assessment during the rotations and throughout the year. At KS4 students are assessed using GCSE criteria and tracking of progress is logged on the PLCs. These are used by staff and students to inform lesson planning and to inform students on how to improve work.

More formative assessment is carried out in lesson through questioning to check understanding and targeted, planned, questions that allow for follow up questions. Students are expected to feedforward explicitly from at least one sticker in each rotation and regularly throughout the course at KS4. However,

a lot of feedback is verbal when students are completing practical tasks. Whole class marking ('The Michaela Way') allows staff to mark books and pick up on common misconceptions and allow them to target specific areas for improvement in the following lesson. This is also used when marking exams in food.

Appendix 1

An example of the Design KS3 assessment based on the skills expected. Each criteria ('Research and Develop', 'Make' and 'Evaluate and Adapt') gets progressively more demanding with every student having different targets in year 7&8 that relate to their prior attainment.

An example of the 3D Design rotation KPIs

Research and develop ideas	Make	Evaluate and Adapt Work
❑ **Select** research from two different sources ❑ **Explain** what the project is and what you are doing	❑ Classwork is complete and shows use of different materials/ ingredients and processes **correctly** ❑ **Understand** how to **connect** different ideas from lessons	❑ **Explain** how you have used materials/ ingredients and processes ❑ Use and spell keywords correctly
❑ Collected research from three sources that **relate** to the project and your own ideas (internet, books, observations, etc.) ❑ Experimented with different materials within the project to **discover** new techniques and processes.	❑ Show **control** of at least 3 different types of materials/ ingredients and techniques ❑ During practical work show some **independence**, prior knowledge and **understanding**	❑ **Record** what has been done well and how it can be **modified** to make improvements in context ❑ Use and spell all **relevant** keywords in a structured extended sentences and/ or use graphs and tables to present findings
❑ Varied and **personal** research has informed your own ideas ❑ Taken risks when developing own ideas and **applying** knowledge; showing independence	❑ Shown control of all materials/ ingredients and techniques to a more developed and refined standard; showing some accuracy ❑ Apply skills independently when making products/ art and develop work where necessary	❑ Use **evaluations** to **modify** work and make it better ❑ Use all **relevant** keywords in structured, extended sentences using a variety of connectives and/ or use other relevant methods to record findings
❑ Ideas explore various possibilities and **justify** the reasons for my own personal developments that communicate the concept of the project	❑ Show use of materials/ ingredients taking their properties into **consideration** to improve accuracy and support intentions	❑ Confidently use the correct vocabulary for the topic and use a **variety** of ways to communicate (eg, graphs, paragraphs etc.)

| Research and Develop Ideas	Make	Evaluate and Adapt Work
☐Understand how your research links together to develop ideas ☐Record using adequate skill with some perseverance	☐To use all equipment and follow process correctly and safely	☐Critically evaluate mistakes within work and plan how to refine and improve n future workshop tasks. ☐Use subject specific language and terms accurately .
☐Understand the connections between own research and the methods used in producing a catapult– wood joints. ☐Record using accomplished skill to complete a task	☐Show control of some materials and techniques	☐Analyse your mistakes and describe what you learnt from them. ☐Make relevant and useful observations in own words on how to solve issues and problems.
☐Perceptively justify your ideas and communicate this using subject specific language. ☐Record using confident skill and attention to detail	☐Shown control of all materials and processes to a more developed and refined standard; showing accuracy.	☐Evaluate work naming tools and using subject specific language. ☐Use correct vocabulary and fully justify your writing, using the brief to answer evaluation points.
☐Record ideas and the work of others' using confident skill showing attention to details reviewing and relating to the brief and make independent decisions to create a personal response	☐Show use of materials taking their properties into consideration to improve accuracy and support intentions	☐Evaluate work drawing together all of the influences and explain the development and decisions ☐Use correct vocabulary and the correct communication method to support my creative journey

Art, Textiles, 3D design and Graphics Key Terms

Line: Line is the path left by a moving point. For example, a pencil or a brush dipped in paint. A line can take many forms. It can be horizontal, diagonal or curved. It can also change over its length, starting off curved and ending up horizontal. Line can be used to show many different qualities including contours, feelings, expressions and movements.

Shape: A shape is an area enclosed by a line. It could be just an outline or it could be shaded in. Shapes can be either geometric, like a circle, square or triangle, or irregular. When drawing shapes, you must consider the size and position as well as the shape of the area around it. The shapes created in the spaces between shapes are referred to as negative space.

Form: Form is a three-dimensional shape, such as a cube, sphere or cone. Sculpture and 3D design are about creating forms. In 2D artworks, tone and perspective can be used to create an illusion of form.

Tone: This refers to the lightness or darkness of something. This could be a shade or how dark or light a colour appears. Tones are created by the way light falls on a 3D object. The parts of the object on which the light is strongest are called highlights and the darker areas are called shadows. There will a range of tones in between the highlights and shadows.
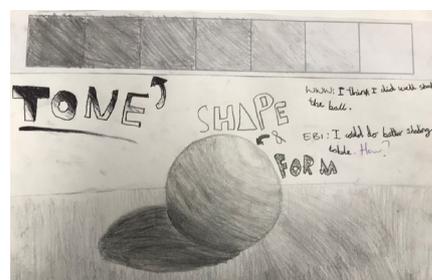
Texture: This is to do with the surface quality of something, the way something feels or looks like it feels. There are two types of texture: actual texture and visual texture. Actual texture really exists, so you can feel it or touch it. Visual texture is created using marks to represent actual texture. It gives the illusion of a texture or surface but if you touched it, it would be smooth.

Pattern: A design that is created by repeating lines, shapes, tones or colours. The design used to create a pattern is often referred to as a motif. Motifs can be simple shapes or complex arrangements. Patterns can be man-made, like a design on fabric, or natural, such as the markings on animal fur.

Colour: Colour theory is a body of practical guidance to colour mixing and the visual effects of a specific colour combinations. There are also categories of colours based on the colour wheel: primary colour, secondary colour, and tertiary colour. This can develop understanding of colour combinations such as complimentary colours, harmonious colours and monochrome.

Composition: The term composition means 'putting together,' and can apply to any work of art, from music to writing to photography, that is arranged or put together using conscious thought. In Art, Textiles, Graphics and 3D Design, composition is often used interchangeably with various terms such as *design, form, visual ordering,* or *formal structure,* depending on the context.

Food Key Terms

Additives: Natural or synthetic chemical substances added to food during manufacture or processing to improve the quality, flavour, colour, texture or stability of the product.

Bacteria: Pathogenic microscopic living organisms, usually single-celled, that can be found everywhere. They can be dangerous, such as when they cause infection, or beneficial, as in the process of fermentation (for wine).
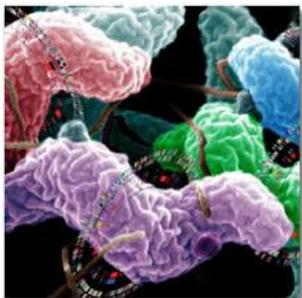
Balanced diet: A diet which provides all the necessary nutrients in the correct amount/proportions to meet the body's needs.

Bridge hold: Use thumb and forefinger and grip either side of the ingredient, use knife under the bridge to cut.

Calcium: Main mineral in the body, teeth and bones. It needs vitamin D to help absorption.

Claw grip: Tips of fingers and thumb tucked under to hold the ingredient before chopping.

Conduction: Transfer of heat through a solid object into food.

Convection: Transfer of heat through a liquid or air circulation into food.

'Eat well guide': Informs individuals of the variety of food groups required for a healthy balanced diet.

Food poisoning: Illness caused by pathogenic bacteria/toxins, for example e-coli: salmonella, listeria, staphylococcus aureus.

Nutrients: The properties found in food and drinks that give nourishment – vital for growth and the maintenance of life. The main nutrients needed by the human body are carbohydrates, proteins, fats, vitamins and minerals.

Paring knife/vegetable knife: A small multi-purpose knife mainly used for slicing and dicing.

Personal hygiene: Following certain routines to ensure a person does not contaminate food with bacteria from their body.

Presentation style: Distinctive way food is presented in different cuisines.

Sensory properties: Smell, appearance and texture, mouth feel influence what we select to eat.

Temperature control: Range of temperature for the storage of food correctly