Oasis Academy Don Valley – Curriculum Map 2019/20

Year Group 7	Half Term 1 9/9/18-26/10/17 7 weeks	Half Term 2 5/11/18-21/12/18 7 weeks	Half Term 3 8/1/19-15/2/19 6 weeks	Half Term 4 25/2/19-30/3/19 5 weeks	Half Term 5 15/4/19-24/5/19 6 weeks	Half Term 6 4/6/19-24/7/19 7 weeks 2 days
Module Title	Technology Skill School	Food and Nutrition	Packaging Design	Bug Hotel	Bug Hotel	Textiles
Key Questions	What is Design & Technology? Why does Technology play such a key role in the modern world? What career options are within Technology? How can we learn how to be sustainable designers and the crucial importance of this? Why and how does literacy play such an important part of the subject? What is the design process and how does this link to industry?	How can be aware of and follow and healthy and balanced diet? How can we learn to cook a variety of dishes? Why is it important we follow correct food safety? What are different food groups and why do we need a balanced diet? How can we learn to be independent and organised when conducting practical work? What is healthy eating?	How is food packaging made and why are material choices such an important consideration? Why is product branding so important? How do we use a range of workshop tools and equipment safely and effectively? How are moulds formed and what type of moulding processes are there? What is CAD/CAM and how is it used within Technology	What is the difference between hardwood, softwood and manufactured boards? **How do we ensure we follow correct Health & Safety in the workshop?** **How do we work with a range of hand tools and machines?** **Why does Technology have cross curricular links with Maths and?** **How do we understand the correct material to use for a project?**	What is the difference between hardwood, softwood and manufactured boards? **How do we ensure we follow correct Health &Safety in the workshop?** **How do we work with a range of hand tools and machines?** **Why does Technology have cross curricular links to Maths and English?** **How do we understand the correct material to use for a project?**	How can we understand designing for different cultures? How can we use tools and equipment safely and effectively? Why is CAD/CAM play such an important role within Technology? Why is it important we understand how to design for others? What is smart textiles? How has the textiles industry evolved?
Key Knowledge covered	Pupils will understand the key concepts of the subject and the importance of Design and Technology in society. Key knowledge will be covered so pupils are equipped to understand and study a range of modules within the subject throughout the year. Pupils will look into design and drawing skills as well as the design process	Pupils will learn the skills to cook and prepare dishes safely. They will understand what is meant by a healthy and balanced diet and how to follow this as well as the importance of doing so. Pupils will begin to look at the functions of food groups on the body. They will understand a range of ingredients and their properties. Pupils will understand the different cooking methods	Pupils will learn about graphics and brand design to create their own packaging for a chocolate bar. They will use computer aided design (CAD/CAM) as well as a range of workshop tools and equipment learning about health and safety and their functions along the way. The focus of this project will be design skills. Pupils will understand the vacuum forming process	Pupils will focus on their practical skills during this project. A range of workshop tools and equipment will be used to produce the final outcome of the bug hotel . Pupils will understand how to use these tools and equipment safely, effectively and accurately. CAD/CAM will be used to introduce pupils to Technology in the modern world.	Pupils will focus on their practical skills during this project. A range of workshop tools and equipment will be used to produce the final outcome of the bug hotel. Pupils will understand how to use these tools and equipment safely, effectively and accurately. CAD/CAM will be used to introduce pupils to Technology in the modern world.	Pupils will combine their design and making skills to write their own specification to base their design and make project around. The importance of designing for different cultures will be studied and implemented into their designs Pupils will learn a more complex range of skills and equipment including

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Pupils will look at sustainable design and the impacts of material choices on society. Pupils will understand how to use the food technology room safely and effectively. They will understand the importance of organisational skills as well as safe preparation.	and prepare a range of dishes working with this. Pupils will understand how to work with, handle and cook raw meat safely as well as understanding the origins of our food. Pupils will begin to understand the term 'air miles' and carbon footprint.	and how moulds are formed and apply this knowledge to design and make creative outcomes. Pupils will begin to understand the importance of quality control and assembly of products. Pupils will begin to use tools and equipment independently	Pupils will work with pine, plywood and acrylic as material choices and understand the different ways of cutting, shaping and finishing each of these. Pupils will understand how to use machines such as the belt sander, pillar drill, laser cutter and power drills alongside a range of hand tools and pieces of equipment	Pupils will work with pine, plywood and acrylic as material choices and understand the different ways of cutting, shaping and finishing each of these. Pupils will understand how to use machines such as the belt sander, pillar drill, laser cutter and power drills alongside a range of hand tools and pieces of equipment	CAD/CAM based around a textiles outcome. Pupils will learn how to operate the sewing machines and CAD/CAM through the use of the embroidery machine. Pupils will understand where textiles sits in the modern world and the impacts of the fashion world on the environment
Key Words and definitions	Sustainability – The ability to be maintained at a certain rate or level Isometric Drawing – A way of representing a 3D object in 2D in technical drawings Design process, technology, sustainable design, target market, isometric drawing, design brief, specification, health and safety, aesthetics, function, materials	Eat-well plate-A pictorial summary of the main food groups and their recommended proportions Healthy eating, nutrients, food groups, saturated fats, unsaturated fats, salt, sugar, dietary requirements, carbohydrates, protein, bridge and claw, mise-en place	Branding- A recognisable symbol that consumers easily identify advertising, packaging, vacuum forming, plastic processing, High impact polystyrene, moulds, CAD/CAM, MDF, belt sander, food labelling, marketing, POS (point of sale)	CAD/CAM – Computer Aided Design and Computer Aided Manufacture Workshop, pine, manufactured board, laser cutter, CAD/CAM, tenon saw, bench hook, band facer, pillar drill, vice, quality control, collaboration, environment, polymers	CAD/CAM – Computer Aided Design and Computer Aided Manufacture Workshop, pine, manufactured board, laser cutter, CAD/CAM, tenon saw, bench hook, band facer, pillar drill, vice, quality control, collaboration, environment, polymers	Smart Textiles – Fabrics that enable digital components such as battery and lights and electronics embedded within them Embroidery machine, smart textiles, fabric, calico, sewing machine, embroidery, fabric decoration, embellishment, applique, cultural design, mood boards, creativity
Formative assessment	During practical work through self, peer and teacher assessment. Regular knowledge checks through class work and homework	During practical work through self, peer and teacher assessment. Regular knowledge checks through class work and homework	During practical work through self, peer and teacher assessment. Regular knowledge checks through class work and homework	During practical work through self, peer and teacher assessment. Regular knowledge checks through class work and homework	During practical work through self, peer and teacher assessment. Regular knowledge checks through class work and homework	During practical work through self, peer and teacher assessment. Regular knowledge checks through class work and homework

Summative assessment	Pupils will be assessed with a baseline assessment at the end of the introduction weeks.	Pupils will be assessed practically in a final independent cook. Theoretical knowledge will be assessed through a written assessment as the end of the module.	Pupils will be assessed practically in a final independent cook. Theoretical knowledge will be assessed through a written assessment as the end of the module.	Pupils will be assessed practically in a final independent cook. Theoretical knowledge will be assessed through a written assessment as the end of the module.	Pupils will be assessed practically in a final independent cook. Theoretical knowledge will be assessed through a written assessment as the end of the module.	Pupils will be assessed practically in a final independent cook. Theoretical knowledge will be assessed through a written assessment as the end of the module.
First-hand experience	Pupils will look at the changing world of Technology	Pupils will work cross curricular with English for elements of this project	Visit a research lab looking at genetic diseases – link to designer babies.	Visit/ links with industry. Pupils will understand how Technology works in industry STEM week activities	Visit/ links with industry. Pupils will understand how Technology works in industry	Cultural celebration. Pupils will celebrate their own and others cultures.