

Scheme of Work 2020 - 2021
Subject: Design and computing.

Year Group: 8

Specification: Design and computing.

Express / Mainstream

Lesson No	Topic & Objectives	Key Activities & Specialist Terminology	Big Think Qs & Stretch	Assessment	Homework	Lit Num SMSC Codes
1 - WEEK BEGINNING 2/11/2020	<u>Computer Science and programming - Safety and responsibility</u> Online safety	Students will be able to ... <ul style="list-style-type: none"> learn which information they should avoid sharing online because it is private. understand which kinds of websites have privacy policies, and why. practice checking websites they visit for privacy policies and privacy seals of approvals	why is online safety important?	Issue books – labels and expectations Logging on Privacy Rules https://www.commonsensemedia.org/educators/lesson/privacy-rules-3-5	YouTube clip https://www.commonsensemedia.org/educators/lesson/private-today-public-tomorrow-9-12	S06, S09,C1,C3,SP9
2 - WEEK BEGINNING 9/11/2020	<u>Computer Science and programming - Safety and responsibility</u> Online safety	Students will be able to ... <ul style="list-style-type: none"> reflect on what it means to be brave and stand up for others offline and online. learn to show empathy for those who have been cyberbullied. generate multiple solutions for helping others when cyberbullying occurs	Why is online safety important?	Worksheet based activities	YouTube clip https://www.commonsensemedia.org/educators/lesson/cyberbullying-be-upstanding-6-8	S06, S09,C1,C3,SP9
3 - WEEK BEGINNING 16/11/2020	<u>Computer Science and programming - Safety and responsibility</u> Bias and reliability	Students will be able to ... Understand bias and reliability and how it can influence people online	We use the internet to find information. However, finding information that is reliable and free of bias is as important as finding the information itself.	worksheet based activities	YouTube clip	S06, S09,C1,C3,SP9

4 - WEEK BEGINNING 23/11/2020	<u>Computer Science and programming - Safety and responsibility</u> The law and ethics	Students will be able to ... <ul style="list-style-type: none"> identify the legal and ethical considerations involved in using the creative work of others. understand an individual's rights and responsibilities as a creator and consumer of content. practice critical thinking and ethical decision making about the use of creative works.	What is copywrite ?	Computer based acidity	Copyrights and Wrongs https://www.commonsensemedia.org/educators/lesson/copyrights-and-wrongs	S06, S09,C1,C3,SP9
5 - WEEK BEGINNING 30/11/2020	<u>Computer Science and programming - internet communication</u> <u>Internet and communication</u>	Students will be able to ... What is the internet and how does it work What is HTML	As a society we need to communicate and share. The internet allows us to communicate and share information in a matter of seconds.	Video on the internet Create a basic html website /text	Youtube clip on html	S06, S09,C1,C3,SP9
6 - WEEK BEGINNING 07/12/2020	<u>Computer Science and programming - internet communication</u> <u>Internet and communication</u>	Students will be able to ... What is the internet and how does it work What is HTML and how does it work	How does a website work?	Continue to create html website	Youtube clip on html	S06, S09,C1,C3,SP9
7 - WEEK BEGINNING 14/12/2020	<u>Computer Science and programming - internet communication</u>	Students will be able to ... Identify how a search engine works defining searches using Boolean expressions	Key fact: The internet contains billions of pages of information. You use search engines to help you filter through the pages to	Boolean expression worksheet	Youtube clip on search engines	S06, S09,C1,C3,SP9

	<u>Search engines</u>		find the information you need.			
8 - WEEK BEGINNING 19/10/2020	<u>Computer Science and programming - internet communication</u> <u>Search engines</u>	Students will be able to ... Identify how a search engine works defining searches using Boolean expressions lesson 2	Key fact: The internet contains billions of pages of information. You use search engines to help you filter through the pages to find the information you need.	Boolean expression worksheet part 2	Youtube clip on search engines	S06, S09,C1,C3,SP9

Half Term

Year Group: 8

Specification: Pewter Casting – Key rings/ Jewellery

Express / Mainstream

Lesson No	Topic & Objectives	Key Activities & Specialist Terminology	Big Think Qs & Stretch	Assessment (Include relevant GCSE Q stem)	Homework	Lit Num SMSC Codes
1 - WEEK BEGINNING 2/11/2020	Pewter Casting 	<p>Outline task – What are they making? <i>Key rings or jewellery through Pewter casting.</i></p> <p>Show examples – Either physical examples or photographs. Showing them different skill levels, from simple outcomes to more advanced outcomes. Showing examples of what learners will achieve :</p> <p>Step 3 – a basic example shown Step 4 – an intermediate example shown Step 5 + - a complex example shown.</p>	<p>What else could Pewter be used for?</p> <p>What types of industries would this process be useful to?</p> <p>What other types of moulding/casting would they like to do?</p>	<p>Teacher led assessment:</p> <ul style="list-style-type: none"> • Verbal feedback • Peer assessment • Tips and hints on how to improve. • Guide self-evaluation throughout. 	Doddle	S06, S09,C1,C3,SP9 S06, S09,C1,C3,SP9 S06, S09,C1,C3,SP9

		<p>Giving the student a visual representation of what they need to aim for.</p> <p>PowerPoint – What is casting? How many types of moulding casting is there? Why Pewter? How they are going to make their outcome.</p> <p>First task: Design what they want their key ring/ jewellery to look like.</p>				
<p>2 - WEEK BEGINNING 9/11/2020</p>	<p>Pewter Casting</p>	<p>Starter – Worksheet</p> <p>Show Examples - Either physical examples or photographs. Showing them different skill levels, from simple outcomes to more advanced outcomes.</p> <p>Task – Finish the design of what their key ring/ jewellery would look like. Adapt design to account for pouring (show examples)</p>	<p>What else could Pewter be used for?</p> <p>What types of industries would this process be useful to?</p> <p>What other types of moulding/casting would they like to do?</p>	<p>Teacher led assessment:</p> <ul style="list-style-type: none"> • Verbal feedback • Peer assessment • Tips and hints on how to improve. • Guide self-evaluation throughout. 	<p>Doddle</p>	<p>S06, S09,C1,C3,SP9</p>
<p>3 - WEEK BEGINNING 16/11/2020</p>	<p>Pewter Casting</p>	<p>Starter – Worksheet</p> <p>Show Examples - Either physical examples or photographs. Showing them different skill levels, from simple outcomes to more advanced outcomes.</p> <p>Task –</p>	<p>What else could Pewter be used for?</p> <p>What types of industries would this process be useful to?</p> <p>What other types of moulding/casting would they like to do?</p>	<p>Teacher led assessment:</p> <ul style="list-style-type: none"> • Verbal feedback • Peer assessment • Tips and hints on how to improve. 	<p>Doddle</p>	<p>S06, S09,C1,C3,SP9</p>

		<ul style="list-style-type: none"> • Add markings to MDF sheets, marking which sheet is which. (Front/design/back) • Add guideline on design sheet. • Transfer design onto MDF making sure it fits within the recommended guidelines. 		<ul style="list-style-type: none"> • Guide self-evaluation throughout. 		
4 - WEEK BEGINNING 23/11/2020	Pewter Casting	<p>Starter – Worksheet</p> <p>Show Examples - Either physical examples or photographs. Showing them different skill levels, from simple outcomes to more advanced outcomes.</p> <p>Task –</p> <ul style="list-style-type: none"> • Finish off marking out MDF. • Make sure pouring points are marked out. • Begin to cut desired shape out. Being careful not to go too close to the edges of the wood. 	<p>What else could Pewter be used for?</p> <p>What types of industries would this process be useful to?</p> <p>What other types of moulding/casting would they like to do?</p>	<p>Teacher led assessment:</p> <ul style="list-style-type: none"> • Verbal feedback • Peer assessment • Tips and hints on how to improve. • Guide self-evaluation throughout. 	Doddle	S06, S09,C1,C3,SP9
5 - WEEK BEGINNING 30/11/2020	Pewter Casting	<p>Starter – Worksheet</p> <p>Show Examples - Either physical examples or photographs. Showing them different skill levels, from simple outcomes to more advanced outcomes.</p> <p>Task –</p> <ul style="list-style-type: none"> • Finish off cutting out design from the MDF. 	<p>What else could Pewter be used for?</p> <p>What types of industries would this process be useful to?</p> <p>What other types of moulding/casting would they like to do?</p>	<p>Teacher led assessment:</p> <ul style="list-style-type: none"> • Verbal feedback • Peer assessment • Tips and hints on how to improve. 	Doddle	S06, S09,C1,C3,SP9

		<ul style="list-style-type: none"> • Piece together the mould ready for casting. • Demonstrate casting to the students. • In small groups one by one, students can cast their designs. • Open mould and drop pewter into water to cool down faster. 		<ul style="list-style-type: none"> • Guide self-evaluation throughout. 		
6 - WEEK BEGINNING 07/12/2020	Pewter Casting	<p>Starter – Worksheet</p> <p>Show Examples - Either physical examples or photographs. Showing them different skill levels, from simple outcomes to more advanced outcomes.</p> <p>Task –</p> <ul style="list-style-type: none"> • Finish off cutting out design from the MDF. • Piece together the mould ready for casting. • Demonstrate casting to the students. • In small groups one by one, students can cast their designs. <p>Those that have casted their designs and they have cooled down. They can file and polish their outcome until it reaches the desired finish.</p>	<p>What else could Pewter be used for?</p> <p>What types of industries would this process be useful to?</p> <p>What other types of moulding/casting would they like to do?</p>	<p>Teacher led assessment:</p> <ul style="list-style-type: none"> • Verbal feedback • Peer assessment • Tips and hints on how to improve. • Guide self-evaluation throughout. 	Doddle	S06, S09,C1,C3,SP9
7 - WEEK BEGINNING 14/12/2020	Pewter Casting	<p>Starter – Worksheet</p> <p>Show Examples - Either physical examples or photographs.</p>	<p>What else could Pewter be used for?</p>	<p>Student to photograph their work and self-evaluate their project against steps using</p>	Doddle	S06, S09,C1,C3,SP9

		<p>Showing them different skill levels, from simple outcomes to more advanced outcomes.</p> <p>Task – Finish off filing and polishing, then add key ring loop or desired jewellery attachment.</p> <p>Evaluate – Answer evaluation questions provided.</p>	<p>What types of industries would this process be useful to?</p> <p>What other types of moulding/casting would they like to do?</p>	<p>the provided evaluation sheet.</p> <p>Self-evaluation question examples:</p> <ul style="list-style-type: none"> • How did it turn out? • Are you pleased with it? • Would you change anything? • Would you do anything differently next time? <p>Teacher then to grade each project with written feedback for each student.</p>		
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Half Term