

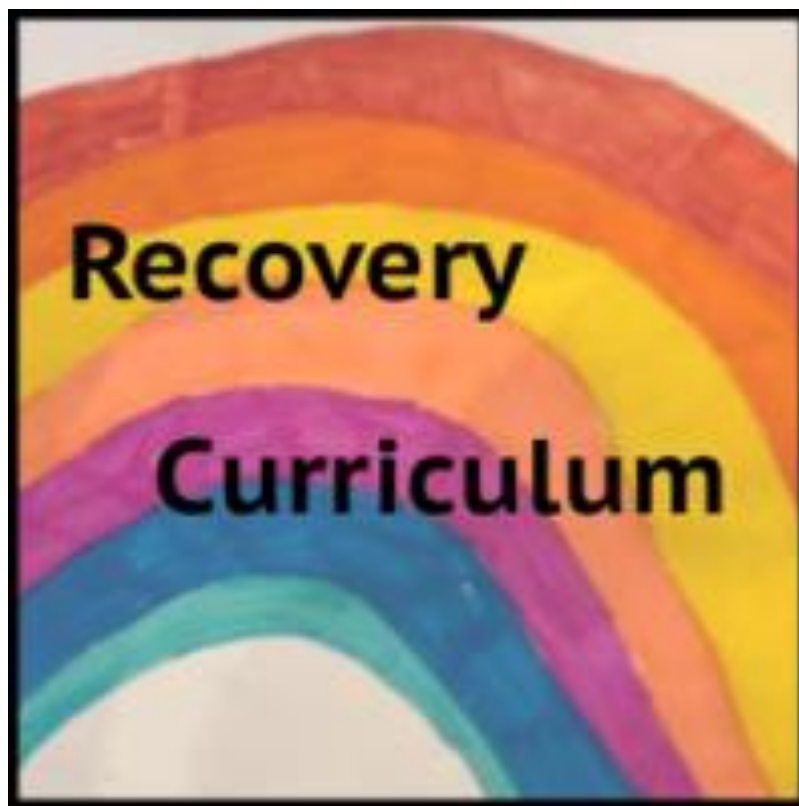
# RECOVERY CURRICULUM

Subject: Btec Engineering

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Subject:	Btec	Teacher:	Mr Bell
Year:	11	Class:	11A & 11C
Unit title:	Materials and Process Recap (recovery)		
Duration:			
Intent			
Intent Statement - at Landau Forte Amington, we believe learning powerful knowledge helps students achieve and creates a fairer society. How are you trying to accomplish this, with this unit/topic?			
This topic will focus on student recovery following the pandemic, which has resulted in students experiencing the following possible losses: routine, structure, friendship, opportunity and freedom. It will support students academically, socially and emotionally, in order to transition students back to Academy life and support with the issues resulting from loss.			
Aims - what do you want pupils to be able to know and do by the time they finish this unit/topic?			
To understand and apply materials and manufacturing processes to a given product			
Academy values – at Landau Forte Amington, we want students to be ambitious, brave and kind. How are these values promoted in this PoS?			
Students will be encouraged to be ambitious in their desire to get back to normal and embrace methods of getting back to practical activities. They will be encouraged to be brave and have a go at activities they have become unfamiliar with. Kindness will be shown in understanding that everyone ones has had to deal with their own issues during lockdown and to show understanding of other people's opinions.			
Content – what is being covered, ensuring breadth & depth?		National Curriculum/Exam Specification - how does the content link to the NC or Exam Spec?	
Basic materials and processes to understand how a product is made.		Component 3: exam paper 2	
Powerful Knowledge - what powerful knowledge is included in this SoW? Consider what knowledge is it important for our students to know, so that when they leave school they can engage in and lead discussions, with people from the most advantaged backgrounds?			

<b>Implementation</b>	
<b>GAPS</b>	
<b>Identification</b> – how are you going to identify the gaps in knowledge/skills?	<b>Triage</b> – how are you going to rank order these gaps in knowledge/skills and 'fill' them, in order of importance?
Attempting Exam 1 paper 2	Rank order of instances of misunderstanding of the exam questions.
<b>KEY CONCEPTS</b>	
<b>Key Concepts</b> – what are the key concepts being taught?	<b>Progression</b> – how will studying these key concepts support progression to the traditional curriculum that has been planned?
Materials and processes needed to analyse a given product.	To reaffirm base knowledge, to allow progression for unit 2 work and exam.
<b>WELLBEING</b>	
<b>Lockdown</b> – how will students share their experiences of lockdown?	<b>Social and Emotional</b> – how will student social and emotional health be supported?
Discussion of their work over lockdown and any interesting engineering stories	Any discussions will focus on student needs and take into account students different experiences of lockdown.
<b>RE-ESTABLISH</b>	
<b>Learning Skills</b> – how are you going to re-establish the skills for learning?	<b>Relationships</b> – how are you going to re-establish classroom relationships?
Routines will be recapped. Walk through of exam paper will be given also.	Seating plans will be based around known friendship groups Teachers will be sharing their experiences of lockdown to make students realise we have all experienced similar things
<b>OPPORTUNITIES</b>	

<b>Discussion</b> – what are the discussion based opportunities?	<b>Group</b> – what are the group work based opportunities (while still ensuring social distancing)?
Discussion of their work over lockdown and any interesting engineering stories	Walk through of exam questions/group work of materials.

Delivery								
1		1) Lesson Type (classroom or blended for remote homework)		2) DNA (Do Now Activity/Reading)		3) Learning Intentions (what, why & how)		
		Classroom (whole sequence completed)	X	How many different types of metals can you name?	What	To investigate the properties and characteristics of the different metals available for manufacturing a prototype design.		
		Blended (live and remote as independent study)	<input type="checkbox"/>		Why	To identify the characteristics and properties of different materials. To sort and select materials based on an understanding of their properties. To be familiar with the full range of metals available at school.		
					How	To recap and research material properties.		
	Number of lessons in cycle:	4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)		6) Prepare for Practice (model/ scaffold)		Synchronous (live)
		language involved in describing the properties of metals.		Direct questioning for student to give meaning to descriptive properties word.		Model first metal material		
		7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)		9) Review (daily/monthly)		Asynchronous (remote)
		Students to complete Metals Sampler Task		Student work reviewed on visualizer		Plenary: Metals Match-Up Activity		
2		1) Lesson Type (classroom or blended for remote homework)		2) DNA (Do Now Activity/Reading)		3) Learning Intentions (what, why & how)		
		Classroom (whole sequence completed)	X	What do we mean by 'wasting'?		What	To investigate how metals can be wasted in different ways in a workshop	

		Blended (live and remote as independent study)	<input type="checkbox"/>				environment when making final prototypes.
						Why	To describe what 'wastage' means in relation to materials and technology. To use and describe processes associated with 'wastage' in my work. To be familiar with the full range of wasting tools and processes in the school workshop.
						How	By studying different shaping methods for metals.
Number of lessons in cycle:		4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)		6) Prepare for Practice (model/ scaffold)	Synchronous (live)
		Recap wastage processes of metal that can be done in A01		Targeted questioning.		Model how to use several processes.	
		7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)		9) Review (daily/monthly)	Asynchronous (remote)
		Independent- Make a list of the equipment available in your school's workshop.		Feedback through discussion of students work if live		Plenary: Quality of Finish	
3		1) Lesson Type (classroom or blended for remote homework)		2) DNA (Do Now Activity/Reading)		3) Learning Intentions (what, why & how)	
		Classroom (whole sequence completed)	X	What do we mean by 'addition'?		What	To investigate the ways that different metals can be added to, or joined, in a workshop environment when making final prototypes.
		Blended (live and remote as independent study)	<input type="checkbox"/>			Why	I can describe what 'addition' means in relation to materials and technology. I can use and describe processes associated with 'addition' in my work. I am familiar with the full range of addition tools, resources and processes in the school workshop
						How	By studying different joining methods for metals.

Number of lessons in cycle:	4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)	6) Prepare for Practice (model/ scaffold)		Synchronous (live)	
	Recap joining processes of metal that can be done in A01		Targeted questioning.	Model how to use several processes.			
	7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)	9) Review (daily/monthly)		Asynchronous (remote)	
	Independent- Make a list of the equipment you have available to you on the Addition of Metals Activity Sheet.		Feedback through discussion of students work if live	Plenary: Suitability			
4		1) Lesson Type (classroom or blended for remote homework)		2) DNA (Do Now Activity/Reading)		3) Learning Intentions (what, why & how)	
		Classroom (whole sequence completed)	X	<b>How many different types of plastic/polymers can you name?</b>  <b>How many types of plastic or plastic items can you see in this room?</b>	What	To investigate the properties and characteristics of different polymers available for manufacturing a prototype design.	
		Blended (live and remote as independent study)			Why	To identify the characteristics and properties of different materials. To sort and select materials based on my understanding of their properties. To be familiar with the full range of polymer products available at school.	
					How	To recap and research material properties.	
	Number of lessons in cycle:	4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)	6) Prepare for Practice (model/ scaffold)		Synchronous (live)
		Polymers – Different Types		Targeted questioning.	Model first metal material		
		7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)	9) Review (daily/monthly)		Asynchronous (remote)
		Polymers Sampler Task- Using the internet find out four different polymers and their properties.		Use Visualizer to go over students work	Plenary: Polymers Match-Up Activity		

5		1) Lesson Type (classroom or blended for remote homework)		2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)		
		Classroom (whole sequence completed)	X	<b>What do we mean by 'wasting'? Check the keywords if you're not sure!</b>  <b>Discuss how we can waste polymers in design and technology, and make a list with your partner on a sticky note. Which methods have you used before?</b>	What	To investigate how polymers can be wasted in different ways in a workshop environment.	
		Blended (live and remote as independent study)	<input type="checkbox"/>		Why	I can describe what 'wastage' means in relation to materials and technology. I can use and describe processes associated with 'wastage' in my work. I am familiar with a range of wasting tools and processes in the school workshop.	
					How	By studying different shaping methods for polymers.	
	Number of lessons in cycle:	4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)	6) Prepare for Practice (model/ scaffold)		Synchronous (live)
		Recap wastage processes of metal that can be done in A01		Targeted questioning.	Model how to use several processes.		
		7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)	9) Review (daily/monthly)		Asynchronous (remote)
Use your Wasting Polymers Activity Sheet to make a list of the wasting processes and tools available in your school's design and technology workshop.		Feedback through discussion of students work if live	Plenary: Quality of Finish				

6		1) Lesson Type (classroom or blended for remote homework)		2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)	
		Classroom (whole sequence completed)	X	<b>What do we mean by 'addition'? Check the key terms if you're not sure!</b>  <b>Discuss how we can join polymers in design and technology, and make a list with your partner on a sticky note. Which methods have you used before?</b>	What	To investigate how polymers can be added to, or joined, in a workshop environment.
		Blended (live and remote as independent study)	<input type="checkbox"/>		Why	To describe what 'addition' means in relation to materials and technology. To use and describe processes associated with 'addition' in my work. To demonstrate awareness of a range of addition tools, resources and processes in the school workshop.

				How	By studying different joining methods for polymers.			
Number of lessons in cycle:	4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)		6) Prepare for Practice (model/ scaffold)		Synchronous (live)	
	Recap joining processes of metal that can be done in A01		Targeted questioning.		Model how to use several processes.			
	7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)		9) Review (daily/monthly)		Asynchronous (remote)	
	Independent- Use your Addition of Polymers Activity Sheet to make a list of the joining equipment available in your school's design and technology department.		Feedback through discussion of students work if live		Plenary: Suitability for Strength			
7		1) Lesson Type (classroom or blended for remote homework)		2) DNA (Do Now Activity/Reading)		3) Learning Intentions (what, why & how)		
		Classroom (whole sequence completed)	<input type="checkbox"/>		What			
		Blended (live and remote as independent study)	<input type="checkbox"/>		Why			
					How			
	Number of lessons in cycle:	4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)		6) Prepare for Practice (model/ scaffold)		Synchronous (live)
		7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)		9) Review (daily/monthly)		Asynchronous (remote)
8		1) Lesson Type (classroom or blended for remote homework)		2) DNA (Do Now Activity/Reading)		3) Learning Intentions (what, why & how)		
		Classroom (whole sequence completed)	<input type="checkbox"/>		What			



	Number of lessons in cycle:	Blended (live and remote as independent study)	<input type="checkbox"/>		Why		
					How		
		4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)		6) Prepare for Practice (model/ scaffold)	Synchronous (live)
		7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)		9) Review (daily/monthly)	Asynchronous (remote)
9	1) Lesson Type (classroom or blended for remote homework)	Classroom (whole sequence completed)	<input type="checkbox"/>	2) DNA (Do Now Activity/Reading)	What		
					Why		
		Blended (live and remote as independent study)	<input type="checkbox"/>		How		
	Number of lessons in cycle:	4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)		6) Prepare for Practice (model/ scaffold)	Synchronous (live)
		7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)		9) Review (daily/monthly)	Asynchronous (remote)
10		1) Lesson Type (classroom or blended for remote homework)		2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)		

		Classroom (whole sequence completed)	<input type="checkbox"/>		What		
		Blended (live and remote as independent study)	<input type="checkbox"/>		Why		
			How				
	Number of lessons in cycle:	4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)	6) Prepare for Practice (model/ scaffold)		Synchronous (live)
			7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)	9) Review (daily/monthly)	