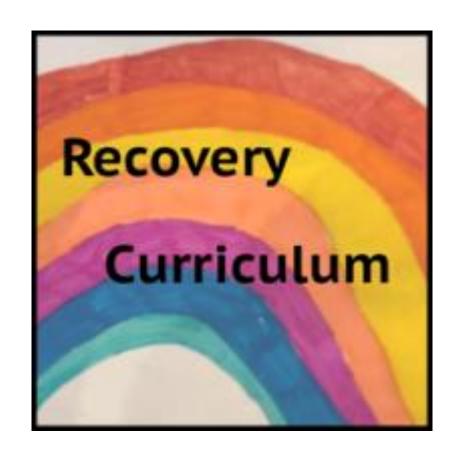
## RECOVERY CURRICULUM

Subject: Btec Engineering

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Updated:



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	Component 3: exam paper 2
made.	

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?

Implementation	
•	GAPS
Identification – 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.
KEY (	CONCEPTS
Key Concepts – 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.
WE	LLBEING
Lockdown – 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.
RE-I	ESTABLISH
<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
OPPO	ORTUNITIES

<b>Discussion</b> – what are the discussion based opportunities?	Group – 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.

Del	ivery	/					
		Lesson Type (classroom or blended for remote homework	k)	2) DNA (Do Now Activity/Reading)		3) Learning Intentions (what, why & how)	
		Classroom (whole sequence completed) X	X	Wr	What To investigate the properties and characteristics of the different metals		
		Blended (live and remote as independent study)			\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	available for manufacturing a prototype design.	<del></del>
				How many different types of metals can you name?	Why	To identify the characteristics and properties of different materials.  To sort and select materials based on ar	
						understanding of their properties.  To be familiar with the full range of meta	
1					How	available at school.  To recap and research material	
	<u></u>	4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)		properties.  6) Prepare for Practice (model/ scaffold)	S
	ons in cycle:	language involved in describing the properties of metals.		Direct questioning for student to give meaning to descriptive properties word.	Model fir	6) Prepare for Practice (model/ scaffold)  rst metal material	Synchion (live)
	of less	7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)		9) Review (daily/monthly)	5003
	Number of lessons in	Students to complete Metals Sampler Task		Student work reviewed on visualizer	Plenary: Activity	Metals Match-Up	Asynchionous (remote)
		Lesson Type     (classroom or blended for remote homework	k)	2) DNA (Do Now Activity/Reading)		<ol><li>3) Learning Intentions (what, why &amp; how)</li></ol>	
2		Classroom (whole sequence completed)	X	What do we mean by 'wasting'?	What	To investigate how metals can be waste in different ways in a workshop	∍d

	Number of lessons in cycle:	A) New Material (previous learning/ new material) Recap wastage processes of metal that cobe done in A01  7) Deliberate Practice	can	5) Check for Understanding (questioning/checking) Targeted questioning.  8) Feedback	How Model h	Sync	(live)
	of les	(guided/ independent)	- 1	(light/deep)	Diaman	(daily/monthly)	(0)
	Number	Independent- Make a list of the equipmen available in your school's workshop.	11	Feedback through discussion of students work if live	Plenary:	9) Review (daily/monthly) : Quality of Finish	(remote
		1) Lesson Type		2) DNA		3) Learning Intentions	
		(classroom or blended for remote homework Classroom	ork)	(Do Now Activity/Reading)	) A/I=1	(what, why & how)	
		(whole sequence completed)  Blended	X		What	To investigate the ways that different metals can be added to, or joined, in a workshop environment when making final prototypes.	ıl
3		(live and remote as independent study)		What do we mean by 'addition'?	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  By studying different joining methods for metals.	1 

	<i>a</i> ;	4) New Material		5) Check for Understanding		6) Prepare for Practice	NS N
	Ç	(previous learning/ new material)		(questioning/checking)		(model/ scaffold)	Synchronous (live)
	Ú	Recap joining processes of metal that can	n be	Targeted questioning.	Model h	now to use several processes.	chror (live)
	Ë	done in A01					)C
	Suc						Syr
	) SS(	7) Deliberate Practice		8) Feedback		9) Review	
	f le	(guided/independent)		(light/deep)		(daily/monthly)	000
	Number of lessons in cycle:	Independent- Make a list of the equipmen	nt	Feedback through discussion of students	Plenary:	Suitability	Asynchronous (remote)
	equ	you have available to you on the Addition		work if live	110110117.	, 001101011117	chr
	υn	Metals Activity Sheet.					ync (re
	Z	, , , , , , , , , , , , , , , , , , , ,					As
		1) Lesson Type		2) DNA		3) Learning Intentions	
		(classroom or blended for remote homewo	ork)	(Do Now Activity/Reading)		(what, why & how)	
		Classroom	V		What	To investigate the properties and	
		(whole sequence completed)	X			characteristics of different polymers	
		Blended		How many different types of	available for manufacturing a prototype design.		
		(live and remote as independent study)					
		(iive and femore as independent steay)		plastic/polymers can you name?	Why To identify the characteristics and		
				plastic/polymers can you name:		properties of different materials.	
				How many types of plastic or plastic items		To sort and select materials based or	n my
			Ш	can you see in this room?		understanding of their properties.	
				Cam you soo iii iiiis iooiiii		To be familiar with the full range of	
						polymer products available at schoo	ol.
4					How	To recap and research material	
4				5) 01 1 5 11 1 1 1		properties.	
		4) New Material		5) Check for Understanding		6) Prepare for Practice	Synchronous (live)
	cycle:	(previous learning/ new material) Polymers – Different Types		(questioning/checking) Targeted questioning.	Model fi	(model/ scaffold) irst metal material	onc (e
	C	Folymers – Different Types		raigeted questioning.	Modern		chror (live)
	Ë.						) (nc
	SUC						Sy
	SSS	7) Deliberate Practice		8) Feedback		9) Review	٧٥.
	Number of lessons in	(guided/ independent)		(light/deep)		(daily/monthly)	Asynchronous (remote)
	0	Polymers Sampler Task- Using the internet f	find	Use Visualizer to go over students work	Plenary:	Polymers Match-Up Activity	ynchronc (remote)
	pe	out four different polymers and their					chr mo
	ω	properties.					ynd (re
	Ž						Asi

		1) Lesson Type		2) DNA		3) Learning Intentions		
		(classroom or blended for remote homew	ork)	(Do Now Activity/Reading)		(what, why & how)		
		Classroom (whole sequence completed)	Χ			What To investigate how polymers can be wasted in different ways in a workshop		
		Blended		What do we mean by 'wasting'? Check the		environment.		
		(live and remote as independent study)		keywords if you're not sure!	Why	I can describe what 'wastage' mear		
				Discuss how we can waste polymers in		relation to materials and technology I can use and describe processes	·	
			П	design and technology, and make a list with		associated with 'wastage' in my wor	·k.	
			Ш	your partner on a sticky note.		I am familiar with a range of wasting	tools	
				Which methods have you used before?	How	and processes in the school worksho		
5					пом	polymers.	JS 101	
		4) New Material		5) Check for Understanding		6) Prepare for Practice	SN	
	cle:	(previous learning/ new material)		(questioning/checking)	Madalb	(model/ scaffold)	ouo (s	
	Number of lessons in cycle:	Recap wastage processes of metal that can be done in A01		Targeted questioning.		ow to use several processes.	chror (live)	
							Synchronous (live)	
	ssor	7) Deliberate Practice		8) Feedback		9) Review		
	of le	(guided/ independent)		(light/deep)		(daily/monthly)	ous (	
	er o	Use your Wasting Polymers Activity Sheet to make a list of the wasting processes and tools		Feedback through discussion of students work if live	Plenary: Quality of Finish		Asynchronous (remote)	
	qui	available in your school's design and	OOIS	WOIK II IIVE			nc <mark>r</mark> rem	
	2 Z	technology workshop.					Asy (	
		1) Lesson Type		2) DNA		3) Learning Intentions		
		(classroom or blended for remote homew	ork)	(Do Now Activity/Reading)		(what, why & how)		
		Classroom (whole sequence completed)	Χ	What do we we are by faddition?? Check the	What	To investigate how polymers can be		
		Blended		What do we mean by 'addition'? Check the key terms if you're not sure!		added to, or joined, in a workshop environment.		
6		(live and remote as independent study)			Why	To describe what 'addition' means in		
				Discuss how we can join polymers in design and technology, and make a list with your		relation to materials and technology To use and describe processes	·.	
				partner on a sticky note. Which methods		associated with 'addition' in my work	k.	
				have you		To demonstrate awareness of a rang	ge of	
				used before?		addition tools, resources and process the school workshop.	ses in	
						TITE SCHOOL WORSHOP.		

				How By studying different joining methods for polymers.
	ii.	4) New Material (previous learning/ new material)	5) Check for Understanding (questioning/checking)	6) Prepare for Practice (model/ scaffold)
	Number of lessons in cycle:	Recap joining processes of metal that can be done in A01	Targeted questioning.	6) Prepare for Practice (model/ scaffold)  Model how to use several processes.
	f lesso	7) Deliberate Practice (guided/ independent)	8) Feedback (light/deep)	9) Review (daily/monthly)
	Number o	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	(daily/monthly)  Plenary: Suitability for Strength  (by the way of
		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)		What Why
		Blended (live and remote as independent study)		How
	:ie:	4) New Material (previous learning/ new material)	5) Check for Understanding (questioning/checking)	6) Prepare for Practice (model/ scaffold)
7	ons in cycle:			6) Prepare for Practice (model/ scaffold)
	of less	7) Deliberate Practice (guided/ independent)	8) Feedback (light/deep)	9) Review (daily/monthly)
	Number of lessons in			Asynchronous (fremote) (substituting the state of the sta
		1) Lesson Type	2) DNA	3) Learning Intentions
		(classroom or blended for remote homework)	(Do Now Activity/Reading)	(what, why & how)
8		Classroom (whole sequence completed)		What

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

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