## West Kirby School Curriculum Plan Key Stage 3

Subject		Design and Technology
	Subject Lead	Chris Saunders

Year	Aut	umn	Spr	ing	Sum	mer 1
1	Island/Film Set	Materials: Card stock	Night Light Project	Materials: Polymers	CAD Clock Project	Materials: Working
		and polystyrene.		Classification.		with acrylics and
	Health and Safety	Design: Designing for	Recap Health and	What is a polymer?	Recap Health and	vinyl, cutting and
	Baseline Assessment:	a user and client.	Safety	What is a circuit?	Safety	finishing
		Designing to scale,		Design: Designing		techniques.
		cresting scale models.		with restrictions		Design: CAD
		Make:		Orthographic		What is computer
		Cutting Knives and hot		Projection &		aided design?
		Glue.		Rendering		Learn to use the
		Layering effects.		Make: Thermo -		basics of 2D
		Evaluate:		Forming		software to design
		What makes a good		Shaping		products
		scale model? How can		manufactured boards		Make: What is
		you improve your		Basic circuitry and		CAM? Use the Vinyl
		skills?		soldering		to produce your
				Evaluate: Does your		final product!
				product work? How		Evaluate: How has
				can you fix		CAD / CAM helped
				problems?		you make a
						product?
2	FILM SET PROJECT	Materials: Working	Mood Light Project	Materials: Working	Mechanical Toy	Materials: Timbers
		with plastics, resins		with plastics, resins	Project	- hard woods and
	Health and Safety	and wood to create a	Recap Health and	and wood to create a		softwoods, why do
	Baseline Assessment:	final product.	Safety	final product.	Recap Health and	we use them?
		Design: Designing for			Safety	Cams / motions &
		a user and client.				movements: What

		Designing to scale, cresting scale models.  Make: Can you make an accurate product using machines and tools independently?  Evaluate: At each stage of making, how can you improve your product? Would you change any thing		Design: Isometric projection, CAD development. Make: Develop your design through iterative processes and modelling, testing & evaluating before making a final product. Evaluate: What skills have you developed? Test your product and consider how you would improve it.		do cams do? How do they work?  Design: Isometric projection, CAD development.  Testing /  Modelling:  Will my product work? What can I do to improve it?  Make: Can you make an accurate product using machines and tools independently?  Develop independence in CAD using Autodesk design software to make complex design ideas.  Evaluate: What skills have you developed? Test your product and consider how you would improve it.
3	Scale Modelling: Film Set Design.	<b>Design:</b> Designing for a user and client.	Designer Lighting  Recap Health and Safety	Materials: Working with plastics, resins	BOX PROJECT: Designer Box	Materials: Use materials you have not combined

	Designing to scale,	and wood to create a	before such as
Health and Safety	cresting scale models.	final product	concrete, acrylic
	Make: Develop your	Design: Reference	and timber to
	design through	key design	develop a unique
	iterative processes	movements top to	stylized product.
	and modelling, testing	develop a stylish	
	& evaluating before	functional product.	Design: Reference
	making a final		key design
	product.	Materials / Make:	movements top to
	Evaluate: At each	Use materials you	develop a stylish
	stage of making, how	have not combined	functional product.
	can you improve your	before such as	Make: Develop
	product? Would you	concrete, acrylic and	your design
	change anything?	timber to develop a	through iterative
		unique stylized	processes and
		product.	modelling, testing
		Evaluate: At each	& evaluating before
		stage of making, how	making a final
		can you improve your	product.
		product? Would you	Evaluate: At each
		change anything?	stage of making,
			how can you
			improve your
			product? Would
			you change
			anything?