West Kirby School Curriculum Plan Key Stage 3

Subject	Design and Technology
Subject Lead	Chris Saunders

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

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