Foxford Learning Plan

Design and Technology
Year: 7 - Rotation
Topic: Design Craft

Key Skills	Over the course of this topic, I will be able to:
	• Use basic technical drawing techniques (e.g., ruler work, scale, and perspective) to produce accurate design plans.
	• Apply design thinking to plan a marble run that meets a given brief or set of criteria.
	• Select appropriate materials and construction methods to build a working marble run.
	• Test and adapt their design to improve performance, efficiency, and reliability.
	• Evaluate their final product against the design criteria, identifying strengths and areas for improvement.

I will understand:
1. The purpose of accurate drawing in communicating design ideas clearly.
2. How to work to a scale and use measurement tools correctly.
3. The basic principles of gravity, momentum, and friction that affect marble movement.
4. The importance of prototyping and iterative testing during the design process.
5. How to give constructive feedback and self-assess a completed design.

Key Vocabulary	
Accuracy – precision in drawing and measurement.	**Iteration** – the process of improving a design through repeated testing.
Scale – the ratio between the drawing size and the actual object size.	**Friction** – the resistance that slows movement when two surfaces touch.
Prototype – a first or early version of a product to test a concept.	**Evaluation** – assessing the success of a product based on set criteria.

End of Topic Test	
Score:	
Pathway:	