St John Fisher RC Primary School
Year Three Knowledge Organiser – Spring Two – Design & Technology

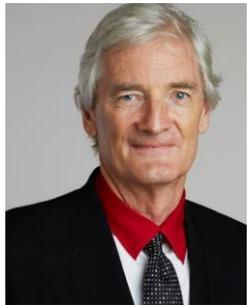| Things I will be taught	Key facts to remember
I know: **Week 1 -**Dyson is a designer and inventor known for making electrical items such as vacuum cleaners Marble runs are games involving a marbles travelling among a series of obstacles **Week 2 -** How to use knowledge of existing products to design my own marble game product aimed at children How to create designs using annotated sketches and cross-sectional diagrams How to design for a target market e.g. children **Week 3 -** How to make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages of using them **Week 4 -** How to safely measure, mark out, cut, assemble and join with some accuracy **Week 5 -** How to strengthen frames using diagonal struts Mechanical systems such as levers and linkages or pneumatic systems create movement **Week 6 -** How to test and evaluate a product I have made	• People have been playing marbles and marble-like games for thousands of years. • Historians believe that marbles started with **cave people** playing with small rounded pebbles or balls of natural clay.

Key Vocabulary

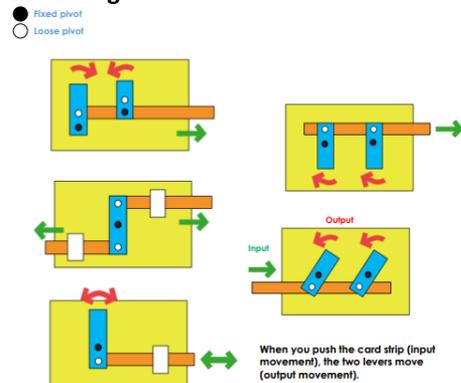|	
lever	A rigid bar which moves around a pivot. Levers are used in many everyday products. In this project children will use card strips for levers and paper fasteners for pivots.
manufacturing	The production of goods through the use of labour, machinery or tools.
purpose	The reason for which something is done or created or for which something exists.
target market	A particular group of consumers at which a product or service is aimed.

Design	Make	Evaluate
Key Knowledge: Children will learn about the designer Dyson and create a Marble Run game linked to Forces. 	**Key Knowledge:** I can make suitable choices from a wider range of tools and unfamiliar materials, exploring how levers and linkages can create movement. 	Have I made an appealing product? How do I know? Is is practical? Is it attractive? Is it strong enough? What do I like about my game? What could I have done better?