

Science Theme Weeks (3 Week Project)

Title: The Great Exhibition (Research, design and Make Project)

Cross curricular links with DT

Year: 2	Play-mania	Subject	National Curriculum Objectives
<p>Teaching Ideas</p> <p>Pupils should sort different materials based on their own and given criteria (e.g. hard, soft, smooth, rough, flexible, stiff). Pupils could use simple venn diagrams to sort materials.</p> <p>Pupils should research and test the properties of different materials, e.g. for strength (carrying out a simple test adding weights to see how much weight they can hold); to see how far they stretch (measuring length with a ruler); to see if they are waterproof. Pupils should be able to decide which everyday materials would and would not be suitable for a playmat and give reasons as to why. They should consider the colour, texture and safety of materials.</p> <p>They should investigate existing products for baby mats, identifying key features, strengths and ways to improve. They could write a market report on the effectiveness of an existing product.</p> <p>They should design and make their own playmat in groups for a baby using their knowledge of materials. This should be child led.</p> <p>Pupils should be able to present the reasons for their choices of materials. They could write a market report evaluating their own or a partners' product, testing each other's designs. They could then market their playmat, creating an advertisement (e.g. poster, leaflet, radio advert, tv advert) or create a presentation to a toy company to pitch their playmat to the industry (i.e. The Apprentice)</p> <p>The project will culminate in a presentation during the 'Great Exhibition', e.g. a market stall in their classroom; presenting their 'pitch' or adverts.</p>	<p>Materials</p> <p>Literacy links: Presentation / advertisement Report on effectiveness – market report</p> <p>Maths links: Venn diagrams Measuring in cm using a ruler Measuring liquid in mm using measuring jug/cylinder</p>	<ul style="list-style-type: none"> ● Ask simple questions and recognise that they can be answered in different ways ● Observe closely, using simple equipment ● Perform simple tests ● Identify and classify (materials) ● Gather and record data to help answer questions (e.g. in table) ● Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. ● Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. <p>Design Technology:</p> <ul style="list-style-type: none"> ● Design purposeful, functional, appealing products for others based on design criteria ● Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and , where appropriate, information and communication technology ● Select from and use a range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining and finishing) ● Select from and use a wide range of materials, including construction materials and textiles, according to their characteristics. ● Explore and evaluate a range of existing products ● Evaluate their ideas and products against design criteria 	

