

**Science Theme Weeks (3 Week Project)**

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

**Cross curricular links with DT**

Year: 2		Play-mania
Teaching Ideas	Subject	National Curriculum Objectives
<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 <b>in groups</b> 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"> <li>• Ask simple questions and recognise that they can be answered in different ways</li> <li>• Observe closely, using simple equipment</li> <li>• Perform simple tests</li> <li>• Identify and classify (materials)</li> <li>• Gather and record data to help answer questions (e.g. in table)</li> <li>• Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</li> <li>• Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> </ul> <p>Design Technology:</p> <ul style="list-style-type: none"> <li>• Design purposeful, functional, appealing products for others based on design criteria</li> <li>• Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and , where appropriate, information and communication technology</li> <li>• Select from and use a range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining and finishing)</li> <li>• Select from and use a wide range of materials, including construction materials and textiles, according to their characteristics.</li> <li>• Explore and evaluate a range of existing products</li> <li>• Evaluate their ideas and products against design criteria</li> </ul>

