

## Design and Technology (Expressive Arts and Design)



### Intent

To encourage the creativity and imagination in children, to design and make products which bring pleasure and solve practical problems. Children will create a range of structures and products, using a variety of tools and equipment to develop practical skills. They will build the resilience and confidence to adapt and refine processes and critically evaluate their end products.

<p><b>Aspiration</b></p> <p>Children will experience food technology in our school kitchen and enjoy a demonstration from our cook.</p> <p>Invite an engineer into school to talk to the children about planning and design.</p>	<p><b>Partnership with parents</b></p> <p>Parents are invited into the setting to carve pumpkins at Harvest and decorate eggs at Easter. They are encouraged to support their children with home projects such as creating a 3D castle in Reception and a 3D building of their choice in Nursery.</p>	<p><b>Inspiration / cultural enrichment</b></p> <p>Children will be inspired by photographs of famous buildings/bridges and architectural masterpieces. They will be introduced to the work of Zaha Hadid.</p>
<p><b>The big picture</b></p> <p>Throughout the Early Years, children will be developing the investigation and practical skills to form the foundations for later work in Design and Technology. They will be encouraged to be inquisitive about how things are put together and what makes them work. Children will use a range of tools, constructions kits, materials and products with increasing accuracy, acquiring design and practical skills and handling tools with increasing control. Children will develop the evaluative language to assess their finished products and be able to explain the process used. This will prepare them for the expectations in year 1, whereby they will need to evaluate against a design criteria.</p>	<p><b>Development Matters Links</b></p> <p><u>3/4</u></p> <ul style="list-style-type: none"> <li>Develop their own ideas and then decide which materials to use to express them.</li> <li>Join different materials and explore different textures.</li> </ul> <p><b>Reception / ELG</b></p> <ul style="list-style-type: none"> <li>Return to and build on their previous learning, refining ideas and developing their ability to represent them.</li> <li>Create collaboratively sharing ideas, resources and skills.</li> <li>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</li> <li>Share their creations, explaining the process they have used.</li> </ul>	<p><b>N C Links</b></p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>design purposeful, functional, appealing products for themselves and other users 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> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> <li>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>explore and evaluate a range of existing products</li> <li>evaluate their ideas and products against design criteria</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>build structures, exploring how they can be made stronger, stiffer and more stable</li> <li>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</li> </ul>
<p><b>Topic Specific Vocabulary</b></p> <p>Design, plan, parts, build, construct, positional/directional language, straight, curved, strong, weak, balance, support, force, resist, pull, push, fast, slow, speed, ramp, flat, friction, grip, thick, thin, join, stick, improve, sequencing adverbs, rough, smooth, soft, tall, short, long, 3d shape names, measure, exact, ruler, tape, mix, fold, stir, add</p>	<p><b>Knowledge / skills</b></p> <p>Children develop the skills to use a wide range of tools with safety and increasing accuracy eg, scissors, glue/tape, dispensers, hole punch, stapler etc. They decide what they want to make and which materials would be most appropriate to use. They modify, adapt and refine the process as they create and justify their choice of technique/material. Children can use construction kits with increasing accuracy and create designs of their choice.</p>	<p><b>Endpoints</b></p> <p>Children will:          Choose appropriate materials, techniques to represent their ideas.          Use tools safely and with increasing accuracy.          Work collaboratively, refining and adapting their ideas.          Talk about and evaluate the process of making their creations</p>
<p><b>Indoor Environment / Continuous Provision</b></p> <p>Children have continuous access to the construction area, which will have templates for designs and plans to be drawn out. They will have photographs (vehicles/buildings/structures) for stimulus and access to a range of building materials of different sizes. Children have access to a kitchen to learn (adult guided) about food technology.</p>		<p><b>Outdoor Environment / Continuous Provision</b></p> <p>Children will have access to outdoor building materials, eg large scale building / dens. They will be encouraged to design and talk about what they are creating and its purpose. Children will adapt and refine their designs and evaluate the process, techniques used and end result.</p>

