

Repton Manor Primary School:

Subject Specific Concepts and the reasons for our choices



Subject: Design and Technology

Concept	Why learn about this concept?	Year group studied
Design	<p>A design is a plan or drawing created to show the look, function and workings of a building, garment or other object before it is made.</p> <p>Design is a Repton key concept because we believe that it is important for children to plan their ideas and develop their drawing skills through this process. Designing allows children to invent a new product or adapt a product to fit a design criteria. This allows children to predict any problems that may occur and allows them to begin to problem solve. The design process allows children to express their creativity and create something for a purpose.</p>	All
Nutrition	<p>Nutrition is the nourishment or energy that is obtained from food consumed or the process of consuming the proper amount of nourishment and energy. An example of nutrition is the nutrients found in fruits and vegetables. An example of nutrition is eating a healthy diet.</p> <p>Nutrition is a Repton key concept because we aim for all children to leave our school knowing how to keep themselves healthy. An important part of that is recognising and eating a healthy diet. Children will also get the opportunity to prepare nutritious food which will be a skill they take into adulthood.</p>	All
Technology	<p>Technology is science or knowledge put into practical use to solve problems or invent useful tools.</p> <p>Technology is a Repton key concept because we believe that in a world of growing technology children will need to leave the school with the knowledge of how to use technology to help them to solve problems that they have been presented with. They will also be able to use technology to help them to invent useful tools for a specific need.</p>	All
Evaluate	<p>To evaluate is the act or the result of evaluating a situation that requires careful consideration to determine the value, nature, character, or quality of something.</p> <p>Evaluation is a Repton key concept because we believe evaluating allows children to determine the effectiveness of their designs and creations to better understand how they can improve their work. It is important for children to recognise how their creations can better fulfil the function they were created for and give and receive constructive criticism to and from their peers.</p>	All
Functionality	<p>The quality or state of being functional. A design that is admired both for its beauty and for its functionality; the set of functions or capabilities associated with something.</p> <p>Functionality is a Repton key concept because we believe that children should be creating with a greater purpose in mind. It is important for children to create something that works, fulfilling the design criteria that was set. This allows children to be more critical of their designs and can be proud of their creations.</p>	All
Innovation	<p>The process of making something new or doing something in a new way. Innovation also has to include the concept of improvement; to innovate is not just to do something differently, but to do or make something better.</p> <p>Innovation is a Repton key concept because we believe that children should be using their own imagination and creating their own designs. It is also an</p>	All

	important skill for children to improve their own creations to better fulfil a purpose or design criteria. This will allow for children to think critically.	
Adapting	<p>To make (something) suitable for a new use or purpose. To modify something to become adjusted to new conditions.</p> <p>Adapting is a Repton key concept because we believe that these skills will help support children in self and peer evaluation of their work and thinking critically to change something for a specific purpose.</p>	All
Problem Finding	<p>Problem finding is outlining a design problem and identifying a specific need for a product. Without doing this, products are unlikely to be successful in the marketplace.</p> <p>Problem finding is a Repton key concept because we believe that children will be better able to evaluate their own work and suggest improvements. It is important for children to understand what they are creating their products for and any problems that they have already thought of in the design process will help them to evaluate and adapt as they go.</p>	All
Make	<p>To create or form something by putting parts together.</p> <p>Making is a Repton key concept because we believe that children should have the opportunity to develop new skills by using a range of resources to develop their creations. These skills will have real life application and will continue to develop over their time at Repton. By developing these skills children will be able to decide which materials and resources they think would best suit their projects.</p>	All