

Design and Technology long term plan



We are a Right Respecting School and this statement supports the following articles from the UN Convention on the Rights of a Child

Article 13: (Freedom of expression): Every child has the right to share information in any way they choose, including by talking, drawing or writing as long as it does not harm others.

Article 28: (Right to education): Every child has the right to a primary education, which should be free. They should be encouraged to reach the highest level of education of which they are capable.

Article 29: (Goals of education) Education must develop every child's personality, talents and abilities to the full. It must encourage the child's respect for human rights, as well as respect for their parents, their own and other cultures, and the environment.

Article 31: (Leisure, play and culture): Children have the right to relax and play, and to join in a wide range of cultural, artistic and other recreational activities.

	Autumn	Spring	Summer
Year 3	FOOD and NUTRITION Healthy and varied diet Designing, making and evaluating a fruit-based product - Fruit Smoothies	MECHANISMS Levers and linkages Designing, making and evaluating a greetings card with moving parts for family or friends	STRUCTURES Shell structures Designing, making and evaluating packaging for a gift for a family member Investigate strengthening of 3D shell structures (use CAD to support design)
Year 4	STRUCTURES Shell structures using CAD Designing, making and evaluating CAD-based packaging to protect and display a food product for sale	Mechanical systems Pneumatics Designing, making and evaluating a moving "creature in a box", moving toy	Electrical systems Simple circuits and switches Designing, making and evaluating a night light for a brother, sister or friend
Year 5	Textiles Combining different fabric shapes Making slippers	Mechanical systems Pulleys or gears Designing, making and evaluating a new toy vehicle for children in a particular age range (use pulleys, gears, electrical circuits)	Structures Frame structures Designing and making a small-scale bird hide for children to use in the school wildlife area Use straws and wooden frames
Year 6	ELECTRONIC SYSTEMS Monitoring and control Using Crumble control boards and knowledge of electrical circuits Design a standing light or a toy with an on-off switch and sensors	TEXTILES Use of CAD in textiles Leavers' T shirts or bags Use CAD for pattern design and for transfer of computer designed imaging	FOOD and NUTRITION Celebrating culture and seasonality Design and make a menu for Y6 parents celebrating their diversity and use of some seasonal produce.