

| | Required prior knowledge | Knowledge to be explicitly taught | How knowledge will be built upon |
|-----------------------|--|---|---|
| Substantive knowledge | <p>Food</p> <p>Construction To evaluate is to think about what went well and what you could improve. (YR Aut)</p> <p>A tool is anything that can be used to make change. (YR Spr)</p> <p>Textiles What different materials are like and what they are best used for. (YR Spr)</p> | <p>Food</p> <p>Where different food is grown and why. Example – Lots of fruit is grown in Africa because of its hot climate and sunshine.</p> <p>Construction A plan is a set of decisions about how to do something.</p> <p>Tools are anything that can be used to make a change to something else or to help get a job done.</p> <p>To roll is to turn something into a ball by wrapping it or shaping it between your hands.</p> <p>A coil is something that has been wound into circles.</p> <p>Textiles Materials are something you can touch, that has a name.</p> <p>Weaving is forming a pattern using two different pieces of material. In Asia, people dye materials with herbs and spices to change colour.</p> <p>Dyeing is adding colour or changing the colour of material by soaking it in liquid.</p> <p>People The Wright Brothers invented, built and flew the world's first successful motor-operated plane.</p> | <p>Food Forest fruits are grown on trees or bushes in the forest. They include strawberries, raspberries, blueberries and blackberries. (Y2 Spr)</p> <p>Construction Mechanisms are the parts that make something work. (Y2 Aut)</p> <p>Sliders and levers are mechanisms that make things move. (Y2 Aut)</p> <p>Sliders help things move up and down and left and right. (Y2 Aut)</p> <p>Joining is putting two or more things together. (Y2 Aut)</p> <p>Textiles A running stitch is small even stitches that do no overlap. (Y1 Sum)</p> <p>A blanket stitch runs along the edge of the material to make it stronger, but a running stitch is used to join two pieces of material together. (Y2 Spr)</p> |

Disciplinary knowledge

Construction

I can design, make and evaluate a telescope, thinking about how I can make it stronger. (Y1 Aut)

Choose the right resources to carry out their own plan. (DM: 3-4)

Textiles

I can choose a material for a purpose and explain why. (YR Spr/Sum)

Food

I can explain what foods are grown in different places around the world.

Construction

I can use cutting, rolling and coiling to create a habitat in a shoebox with moving parts.

Textiles

I can change the colour of a material by dyeing it using spices and teas.

Food

I can name different forest fruits. (Y2 Spr)

Construction

I can design and make a boat that floats on water. I can evaluate the success of my boat. (Y1 Sum)

Textiles

I can use a running stitch to create a design or to join two pieces of material together. (Y1 Sum)

I can alter the appearance of fabric in the style of Hannah Rampley. (Y2 Spr)

I can use a blanket stitch to create a glove from an astronaut or Traction Man. (Y2 Spr)

Key Drivers

Culture and Diversity - which helps pupils to develop enquiring minds about the wider world.

Designers and architects from different countries, genders and periods of time are focused on within DT.

Designers/Architects/Inventors: The Wright Brothers, America (Orville: 1871 – 1948; Wilbur: 1867 – 1912)

Environment and Community - which helps to instil in our pupils a respect for our environment and for our local and wider communities.

Children are taught how to use different materials without creating waste and damage for the environment. Recycled materials are also reused within DT and children regularly use old boxes and junk modelling within construction.

Eco: free access to 'MAKEDO' kits and cardboard during choice and challenge; using recycled materials and old shoeboxes to create a habitat with moving parts; focus on deforestation and the importance of reduce, reuse, recycle.

Creative arts and physical development - which helps our pupils to express themselves and excel as holistic learners.

Children use construction to present their new knowledge in different ways, particularly in the outdoor area.

Physical Development: developing fine motor skills through cutting, rolling, coiling and weaving material; understanding where food comes from supports physical activity.

CoJo – 'Steve Backshall and Me' Mission 3, 4 and 5 – designing, making and evaluating; 'Steve Backshall and Me' – trying different food from around the world and describing the taste.

Learning to learn - which helps pupils to concentrate and focus and build resilience as learners.

Children need time outside within the construction area in order to focus within the classroom. Constructing allows the children to work together, developing both their teamwork skills and resilience.

Across the curriculum: History – designers/architects/inventors are added to the classroom timeline and children explore what the time period was like and how things have changed.

Geography – the impact of deforestation and the importance of reduce, reuse, recycle.

Books: Taking Flight: How the Wright Brothers Conquered the Skies by Adam Hancher