



Co-op Academy
Portland

Design Technology

**Curriculum Intent, Implementation and Impact for
Design Technology at Co-op Academy Portland**

At Co-op Academy Portland, our curriculum is built on the foundations of the statutory National Curriculum. Our deliberately sequenced substantive and disciplinary knowledge will ensure that learning is built progressively from Nursery to Year 6 in our four identified strands that enable our children to become competent designers and creators.

We aim to provide children with a high-quality education that engages, inspires, and challenges them. We will equip pupils with the knowledge and skills needed for their futures through exposure of media, careers, visitors and trips. As pupils progress, we aim to develop their ability to think critically and gain a more rigorous understanding of subjects.

Community is the backbone of our school, and we integrate our Co-op values into our curriculum to benefit our children and families. These values permeate through our curriculum, fostering the next generation of responsible, socially mindful citizens.

Our Design Technology is designed to include four strands of learning. These are;

- Structure
- Mechanisms
- Food
- Textiles

These strands provide our children with a vast range of knowledge and skills in which they can apply into everyday life and learning. Food technology plays an important role in our curriculum at Coop Academy Portland as it helps children to develop an understanding of where food comes from and the importance of nutrition on our health. It also aims to inform pupils about methods of food production and food processing in domestic and commercial situations. Our curriculum also encourages an awareness of social, economic and cultural aspects of food choice and the importance this plays in society.

At Co-op Academy Portland, we follow a sequence of learning in Design Technology. This includes research, technical knowledge, design, make, and evaluate.

Long Term Plan (EYFS):

	Autumn	Autumn	Spring	Spring	Summer	Summer
EYFS			Spring 1: C1: Frozen Planet - Structures C2: Down In The Jungle - Structures	Spring 2: C2: Get Lost In A Book - Mechanisms	Summer 1: C2:Down at the Bottom of the Garden - Mechanisms	Summer 2: C1: Save the Seas - Mechanisms C2: Hero and Heroine - Textiles

What does Design Technology look like in Early Years Co-Op Academy Portland?

- Children have daily opportunities to make their own creations using a wide range of different materials, fixings and tools which are freely available in continuous provision.
- Adults model how to use tools such as scissors, hole punch, string, sellotape, cutters etc. which children then access independently over time.
- They are encouraged to talk about what they would like to make, how they will do it and what they think about it when it is finished.
- They are encouraged to evaluate what they have made and make changes as appropriate. Reference is made to our learning dinosaurs to help children reflect on the learning process (CoETL).
- Other enhancements based on children's interests, or a planned theme provide further opportunities for children to embed, develop and use their DT skills.
- Evidence is recorded in floor books, and captured on displays.
- Topic lessons include links with DT (through EAD) and some tasks will be adult-led to support development of particular creative skills.

Long Term Plan (Years 1-6):

	Autumn	Spring	Summer
Year 1	Structures: Free standing structure	Mechanisms: Levers - Chinese Dragons	Food: Healthy Eating - fruit salad
Year 2	Food: A balanced diet	Textiles: Template and joining techniques	Mechanisms: Wheels and axles
Year 3	Textiles: Sewing	Mechanisms: Linkages and levers	Mechanisms: Pneumatics
Year 4	Structures: CAD modelling Tinkercad	Food: Adapting a recipe	Mechanisms: Electrical components
Year 5	Structures: Bridges	Textiles: Recycled materials	Food: From around the world
Year 6	Structures: Boats	Mechanisms: An alarm system	Textiles: CAD Using computer aided design

How do we know that the children have made progress in Design Technology?

Class Teachers:

- Every lesson starts with a think back quiz, with questions linking back to previous learning. This ensures that any gaps in substantive knowledge are quickly identified and addressed.
- Quality first teaching ensures that AfL opportunities are present throughout each lesson, enabling practitioners to give feedback in the moment to make sure all children make progress.
- Teacher marking identifies any misconceptions, and these are addressed verbally or through written responses by children before the next lesson.
- Teachers assess disciplinary knowledge at the end of every lesson using a Success Criteria slip. This ensures that teachers know which children may need extra scaffolds for future lessons.

Subject Leaders:

- During the half term the subject is being taught, subject leaders will complete learning walks to evaluate the teaching and learning environments related to their subject. This will be completed on the school feedback proforma and shared with teachers in 1:1 feedback
- After a unit has been completed, a book look will be completed for every class, using a cross section of pupil demographics (HA, MA, LA, SEND, EAL and PP). Each lesson will be assessed for its coverage of the key knowledge on the Medium Term Plan, and the effectiveness of the activity. This will create an overall effectiveness score for each child, and a score for the unit.
- As part of this assessment process, pupil voice will also be completed to triangulate this with the book look.
- Assessment is used as a tool to support curriculum development.