Design and Technology Curriculum Journey

Structures

Reception

I can build structures using a range of resources (bricks, boxes, paper and straws etc.) independently and for a purpose.

I can experiment with size when building (height, length and breadth).

I can talk about what happens when the building gets bigger/ smaller and longer and shorter.

Year 1

I can measure and join materials with some support.

I can experiment with joining, rolling and folding.

I can use my own ideas to make the product stronger.

(PLAYGROUNDS)

Year 2

Year 3

I can work accurately to make cuts and holes.

I can join materials.

I can begin to make strong structures.

(PHOTO FRAMES)

Year 4

I can measure carefully to avoid mistakes.

I can develop and use knowledge of how to construct strong, stiff shell structures.

I can use the knowledge of nets of cubes and cuboids and where appropriate more complex 3D shapes.

(NIGHT LIGHT)

Year 5

I can select materials carefully, considering intended use of product and appearance.

I can measure accurately enough to ensure precision.

I can ensure the product is strong and fit for purpose.

(MOVING MONSTERS/ DRAGONS)

Year 6

I can select materials carefully, considering intended use of the product, the aesthetics and functionality.

I can explain how the product meets the design criteria.

I can reinforce and strengthen a 3D frame.

(FAIRGROUNDS)

Year 7

I can use the properties of materials and the performance of structural elements to achieve functioning solutions.