



CURRICULUM – Design Technology Spring Term 2

Key stage 3

What is being taught?

Year 7 learners continue to explore Design Technology skill and its applications within in society and everyday items that we use and take for granted. Working through a project to develop a structure out of spaghetti to create a cradle that will be tested against designs to investigate how much weight it can carry before breaking. Taking skills learnt from math and physics lessons to review the performance of the structure.

Year 8 will be developing their skills into making a moving object for their project. They will need to create models of cars that can be used to help create 2D and 3D drawings of their design of spaghetti cars. From the designs they will then select the best design and make it and investigate if the design was the correct one to build.

Year 9 develop are progressing to more advanced skills and their project has more relationship to the work of a civil engineer. They must investigate different styles bridge constructions and review their benefits and construction design. From the research they will create a design drawing of different bridge construction and then create a bridge to span a set distance and minimum hold its own weight.

How is it being taught?

Year 7 will be taught the key features that can be used to design a cradle that will hold a weight. Drawing and models will be made before they create and test the final design in a competition-based format to see which construction will hold the heaviest weight.

Year 8 Initially learners will continue to use research skills and have the opportunity to look at different car designs to help them formulate their ultimate car design. From the research learners will create a spaghetti car that can move forward when pushed.

Year 9 will use research methods to help them to understand different types of bridge design to allow the learners to create a detailed drawing of a bridge they will meet a set criterion. From their research and design ideas the bridge will then be created out of spaghetti to span a set distance but also to at least hold it on weight.