



# St Benedict's Catholic School

*The Catholic Secondary School for West Suffolk*

## **Design and Technology – Food Curriculum Guide**

### **Year 8**

At KS3 Design and Technology groups are rotated Termly to allow all pupils to experience the 3 key areas of the subject, namely Food and Nutrition, Graphic Products, Resistant Materials. Therefore, each group will move to a different specialism at the end of each term.

### **Course Taught Content**

Pupils begin the course by revisiting their knowledge of food safety. They look at the growth of pathogens and root causes of cross contamination. The 4 C's are identified as the mantra for this year to help them remember how to prevent food poisoning: cleaning, cooking, chilling and cross-contamination.

Another key strand in year eight is to develop a greater understanding of ingredients and some of the science involved in preparation and cooking of food. We begin with some focussed work on the micro nutrient Vitamin C to identify its nutritional functions, sources and the causes of its deficiency in the diet. We carry out a simple experiment with fruit samples to investigate how to prevent oxidation of fruit and vegetables. Then we apply what we have learnt to design and make a salad in a jar; that requires the use of a dressing containing an anti-oxidant and also reflects the demands of the Eatwell guide.

Next, we focus on staple foods to develop students understanding of food choice, and learn more about our food sources and about some of the traditional meals from around the world. Students will then make a number of traditional dishes based on staples ingredients such as rice/ oats / flour. As they do so they will deepen their understanding of the functional properties of Carbohydrates and they will be encouraged to apply what they have learnt (about caramelisation of sugars, dextrinization and gelatinisation of starches) to be able test when their dishes are cooked.

To round off this study on Carbohydrates, we carry out a brief examination of sugar to identify different the sources and its effects on our health and ways of adapting our eating habits to reduce sugar consumption.

We return to food science with a focus on raising agents, to learn what raising agents are and how they are used in cookery. The making of a Yorkshire pudding and other baked dishes are used to illustrate and explain how aeration is achieved, when raising agents are successfully employed, in the preparation and cooking process.

To develop students understanding of food provenance we investigate air miles. We use an AP' to work out how to reduce the air miles on a typical picnic. This also gives us the opportunity to apply some functional maths.

Finally, we focus on developing our understanding of ingredients and food science when we all make home-made butter. We learn about emulsions, how they are formed, the different types of emulsions and their role in making a range of food products.

### **Assessment**

A formal teacher assessment will be carried out part the way through the term, to assess the student's making skills.

They will also receive formative feedback, in-depth assessment of their book and homework. An end of year assessment will be carried out in the last term to assess students' knowledge and understanding, across the whole of the DT subject.

### **Homework Expectations**

Homework is set every couple of weeks (approximately 3 times per half term). The tasks set will vary but will be linked to the focus of the work in class. It may be a simple practical task to further develop skills taught in lessons as well as organising ingredients required for a planned practical activity. Often it will be a written task which might involve: seeking feedback from others in response to ideas, or evaluation of a product made in class. Sometimes it will include personal research, investigation, planning or functional maths. This will involve pupils printing outcomes or completing a worksheet and bringing these to their next lesson, rather than submitting via Edulink. The homework will predominately help pupils to be organised for lessons and inform their learning in class.

### **Reading List**

**Greta Thunberg quotes:** <https://www.bbc.co.uk/newsround/49812183>

**Factors affecting food choice:** <https://www.bbc.co.uk/bitesize/guides/z7fw7p3/revision/1>

**Ethical Food choices opinion:** <https://www.foodunfolded.com/opinion/ethical-food-choices-opinion>

### **Extra and Super Curricular Opportunities**

Time permitting students will complete a fun class challenge to demonstrate their knife skills.