Year 9 Food Technology Unit Plan "Calci Cool"

Lesson Sequence	Resources	Learning Intentions
Introduction and expectations Give out course work books. Look at the Technology cycle for the term (refer to teacher guidelines). Ask students to identify what is different about it from last term. Inform students of the focus for the term. Term one – technology cycle Term two – brief development Term three – planning Term four – evaluation	Photocopied course work book Teacher guidelines	To introduce students to expectations of course
Food technology in industry Watch the video, "Developing New Food Products" – Muesli Bars. Discuss as a class. Emphasise the fact we don't use the words "yuck" and "yum" when evaluating products – just like the video. Students fill in work book. Go over questions together.	Video – 'Developing new food products'	Students see food technology in an industrial environment
What is food technology? Brainstorm as a class the things the students know or might do in food technology. Students copy notes, "What is food technology?" and label food product development, food as a material and recipe development. Discuss as a class.	Notes on, "What is food technology?"	To introduce students to terms and their meanings in food technology. To get students to think about technology in a food context
Codes of practice **Foods room orientation and rules** Students are orientated around practical foods room. Talk about the laundry, pantry, and equipment rooms. Show the students the areas for each kitchen. In teams complete a kitchen find. The first team to finish and have their kitchen items checked correctly win a lolly. Emphasise colour coding for boards, newspaper for scraps, cutlery being in the baskets at the front, tiles beside hobs for hot things, pyrex jugs for microwave safe containers, yellow clothes for wiping benches, tea	Lollie's	Students are aware of the expectations of the practical food rooms and are aware of hygiene and safety routines.

towels etc. Go over the protocol for washing dishes in student work books - “cook’s cleaning code”. **Hygiene and safety** Brainstorm as a class hygiene and safety rules in the foods room. Students complete cut and paste on hygiene in the kitchen. Students complete cloze activity – Do you know your safety rules? Complete for homework. **<u>Introduce structure for practicals</u>** Organisation of ingredients – use of diaries Going over issue and opportunity Reading recipes – ingredients, method, measurements in recipes. Go over examples on the board (t, T, c, ml, g etc) Using attributes Evaluation “my product was successful because…” Organise ingredients for practical – fruit smoothie. Students to choose fruit to use in smoothie. Go through the recipe and issue. **<u>Knowledge and skill development</u>** **<u>Food product analysis activity</u>** Food product analysis checklist using packets of toffee pops. Go through the questions together. Emphasis on packaging, hygiene and safety and sensory attributes of product. **<u>Fruit smoothie practical– using a blender and food processor</u>** Fruit smoothie practical. Show students how to use blender and food processor. Make sure all the attachments click into place. Students make smoothies and evaluate using attributes, not “yuck” and “yum”. Students clean up. Check kitchens. Go around the class and get students to read out their evaluations. Comment on descriptors used	Scissors, glue, A4 paper Toffee pops for class Old toffee pop packages Ingredients for smoothie	Students learn the importance of evaluating what they do using attributes to describe their products Students learn how to use the food processor and blender

and constructive criticism. **<u>Muffin demonstration/ attributes</u>** Organise ingredients for muffins. Go over issue and demonstrate making muffins. Discuss attributes as been desirable characteristics of a product. Talk about the type of sensory attributes you would expect in a muffin, eg even shape, fruitiness, light golden colour etc. Students complete Attribute Analysis sheet. Homework – students describe a food using attributes. Students read out their descriptions and the rest of the class guess the food that they are describing (these can be read out at the end of lessons or in any spare time). **<u>Fruit muffin practical – baking/mixing</u>** Students work in pairs. Reinforce not over mixing muffins. Use paper towel to remove batter spills on pan. Use muffin liners. Use of plates to stop butter splatters in microwaves. Students complete written and oral evaluations on fruit muffins. Students fill in safe and hygienic practice evaluation form, evaluating fruit muffin practical. **<u>Adapting a basic recipe to extend a product range</u>** Discuss rules for adapting a basic recipe. Brainstorm ideas together for making a sweet and savoury muffin. Students write ideas on their sheet. In pairs, students choose whether to make a sweet or savoury muffin. Students write out their ingredients and method for their adapted recipe. Check ingredients. **<u>Novel ideas in food technology</u>** Students complete worksheet New and Interesting Ideas – Pizza in a	Ingredients for muffin demonstration Ingredients for muffins	Students learn about attributes and the importance of using attributes to describe the desirable characteristics of a product as a starting point in brief development Skills - using conventional and microwave ovens, muffin making Students can assess their own progress in the food room Students are able to adapt an existing recipe and evaluate it Students are exposed to novel food technology

cone. **<u>Adapted muffin practical</u>** Students work in pairs. Homework – get an adult to evaluate muffin. **<u>Sensory analysis</u>** Read through sheet on tasting and testing. Ask students to identify the five senses and then <u>the four tastes</u>. On the sheet "designing and making food products in school, label the areas of the tongue sensitive to the four tastes. Set up a coffee, sugar, vinegar and salt solutions to demonstrate the four tastes. Get students to identify the taste. Jellybean tasting – discuss the aim of this test which is to demonstrate that <u>colour is a determining factor when identifying flavour.</u> Students are blindfolded and given jellybeans to taste. Students fill in worksheet. At the end of the lesson, inform the students what the flavours were on the packet. Get a show of hands to see how many students got all 6 samples correct. Reinforce the aim of the test. **<u>Balanced and healthy food choices</u>** Organise ingredients for Shawama practical. Go over the issue and inform students they will be learning about the four food groups and healthy eating. **Healthy food pyramid** Recap the healthy food pyramid. Eat most, eat moderately, and eat least. Get students to identify different foods that fill within the areas of the pyramid. **The four food groups** Talk about the 'eat moderately' and 'eat most' areas and introduce the four food groups. Write down the group name and get each student to identify a food that belongs to each group. Show the students how the	Ingredients for adapted muffin recipe Samples of coffee, sugar, salt and vinegar solutions Cotton buds Glasses Jellybeans Blindfolds Patricia Bawden Textbook – Food, Health and Wellbeing	ideas Students learn about the four tastes and can identify them. Students are aware of the standardised conditions and formal procedures of sensory testing Students understand that colour is a determining factor when identifying flavour Students can identify the four food groups and how they relate to the healthy food pyramid and healthy food choices

four food groups fit into the bottom two thirds of the pyramid. Students copy foods from pg 107 Food, Health and Wellbeing (Patricia Bawden). Students write down the recommended number of servings for an adolescent for each of the four food groups and write examples of food servings. **Nutrition tips** Go over nutrition tips worksheet and identify the 6 nutrients, (carbohydrates, protein, lipids, vitamins, minerals and water). Students write the nutrients on the page. Homework: Students decorate nutrition tips page. **<u>Shawama practical – grilling</u>** Students work in groups of four. Reinforce use of the grill. Green and red chopping boards for vegetables and meat. Written and oral evaluations of Shawamas. **<u>Osteoporosis and calcium</u>** Introduce Osteoporosis and it's link to calcium. Get the students to identify the nutrient that calcium belongs to. Link back to the nutrients. As a class read "Osteoporsis – What is it?" and "Boosting your bone structure" Label the parts of the bone. Complete the cut and paste activity on bones and osteoporosis. Ask the students which food group has the most calcium. Using the meadow fresh calcium chart, go over the calcium rich foods and the recommendations for an adolescent boy and girl in mg. Relate this to 3 servings of milk and milk products. Discuss examples of one serving. Get students to work out how much calcium they are getting. Complete work book and discuss as a class the factors that could be causing teens not to get enough calcium.	Shawama ingredients Scissors, glue	Students understand the nutritional recommendations for healthy eating so they can make informed decisions within their own tech practice Skills - slicing, chopping, grilling Students understand the link calcium has to osteoporosis and can identify calcium rich foods Students understand that as teenagers they require 3 servings of milk and milk products per day

Homework: Students make a poster about calcium and osteoporosis.	A4 paper	
Say cheese! Students taste a range of cheeses (blue, edam, feta, parmesan, camembert etc) and evaluate the appearance, taste, texture and aroma of each product. Students explore fat and calcium contents. Discuss uses etc.	Cheese samples, plates, toothpicks, nutritional info	Students are exposed to a range of cheeses and can identify common uses
Formative assessment Collect in work books and give student feedback on progress this far.		
Introduce assessment task and issue (check year 9 teacher guide for specific teaching for each term's focus) Introduce the assessment for the term. Go over the context, issue, class brief (to develop a balanced, high calcium meal using the roux sauce method) and student instructions. Relate back to the technology cycle. Students write an initial brief (what you are doing, who the product is for and the purpose of making it) and product specifications. Give examples on the board of a good brief and specifications. Discuss the important attributes in a meal (taste, texture, colour, presentation, healthy, portion size etc). Students justify why they are important attributes in a meal.	Teacher guidelines	Students will be introduced to key terms and understand their link to the technology cycle. Students will understand what a brief is and the important attributes to evaluate a meal
Stakeholder profiling Organise groups to work together for the rest of the term. In pairs students develop meals for another pair. Students interview each other to get information for their profiles and to establish a purpose for their food product.		Students will understand the importance of working with stakeholders
The roux sauce method Teacher to demonstrate making a basic roux sauce using a double boiler. Teacher shows pre-made samples showing different thicknesses	Roux sauce ingredients, flavouring ingredients,	Students will be introduced to a ranking

of roux sauce. Discuss the different uses. Students record the uses in their workbook. Each group of students makes the basic roux sauce and adds different flavourings as outlined in work book. Students set up their sample on their kitchen bench with spoons. Discuss how we carry out tasting in a hygienic way. Students go around each kitchen and taste the different samples. Students rank the samples in order of preference in their workbooks. Discuss results. Which sample is preferred? How will this lesson help you in the development of your product? **<u>Skill Development</u>** Students are learning how to cook pasta and make a range of cases which are roux sauce could be potentially used with.	double boilers, tasting spoons	test and know how to make a roux sauce
Pasta and cheese sauce practical – roux sauce making, pasta cooking Students work in pairs. Reinforce use of double boilers, pasta being 'al dente' etc. Homework: own evaluation of pasta and cheese sauce.	Pasta and cheese sauce ingredients	Skills – roux sauce making, pasta cooking (al dente)
Chicken, cream cheese and apricot sauce filo pastries – working with filo, cooking chicken Students work in pairs. Reinforce filo use. Drying out, folding etc. Checking whether chicken is cooked. Homework: own evaluation of filo pastry.	Chicken filo ingredients	Skills – filo pastry
Mini cheese and vegetable tart practical - baking Students work in pairs. Homework: own evaluation of mini vegetable tart.	Mini vegetable tart ingredients	Skills – egg cookery
Crepes with fruit and ice-cream – crepe making	Crepe ingredients	Skills – crepe making

Students work in pairs. Reinforce tilting of pan to make thin crepes, origins of crepe. Homework: own evaluation of crepes. **Existing Ideas** Homework: Using a range of resources (such as recipe books, magazines, internet, supermarket and people etc), students research ways in which a basic roux sauce is used. Students to indicate the resources that they have used. **Concepts** Students brainstorm a range of meal ideas using the roux sauce method. This will be a general description of the meal. It may include picture with annotations. Students need to come up with at least three ideas. **Concept screening** Refer students back to original specification generated. Students transfer specifications to their concept screening chart in work book. Students screen each concept against their specifications to work out the two ideas that they will develop further **Testing/trialling** Students write recipes for their two ideas, organise ingredients, make and evaluate concepts. **Design development** Students develop one idea further as a result of evaluations. Students brainstorm changes to recipe to further meet the brief and specifications. Students write notes in brackets beside changes to say how they meet the stakeholder requirements. Model this to them. Recap high calcium foods and the four food groups. Students rewrite	Students organise ingredients for practical Students organise	Students understand that ideas come from a range of resources Students undertake technological practice

recipe with changes, organise ingredients and make developed recipe. Meals are served to two stakeholders. Take photos for work book. **<u>Stakeholder evaluations</u>** Both stakeholders write written responses in work books. Students glue in photos of developed recipe. **<u>Final brief and specifications</u>** Students write a final brief and specifications taking into consideration stakeholder responses. Students describe the final product. The actual recipe, appearance, texture, taste, aroma, number of servings, garnishing etc, **<u>Hygiene and safety Chart</u>** HACCP chart. Discuss what it stands for: Hazard Analysis Critical Control Point. Explain to the students that it is a system to control hygiene and safety. Work through examples on the board. In pairs, students identify hygiene and safety hazards for their final recipe and work out how they are going to control them. **<u>Practical – final recipe.</u>** Take photos. Stakeholders to be served meal and evaluate. **<u>Final evaluation</u>** Glue in photos of final recipe and evaluate against their final brief and specifications. **<u>Summative assessment (see assessment criteria)</u>** **Nutritional knowledge in food technology** Students complete test in class.	ingredients for practical Digital camera Glue, scissors Ingredients for final recipe Digital camera Glue, scissors, printed photos Test papers	To introduce HACCP as a food control system in the food room Students understand the importance of evaluating against their initial brief and specifications

Assessment of technological practice Students hand in assessment task and folders for assessment. -Technology cycle (term one) -Brief development (term two) -Planning (term three) -Evaluation (term four) **Assessment of food preparation practice** Teacher to make a judgement on student capability and safe and hygienic practice (see assessment criteria).		Students can communicate the next steps in their learning