CROSS CURRICULAR LINKS

# Little masterchefs

## SCIENCE

- Choosing foods for menus - eating the right amounts of different types of food.
- Knowing how different foods help to keep the body healthy.
- Hygiene when cooking.
- Classifying materials.
- Using own garden produce in cooking.
- Changes in cooking.
- Best materials for particular uses, e.g. storing food.
- Changing dough, squashing, bending, twisting, stretching.
- Choosing healthy options.

## DRAMA

- Gathering food from the garden.
- Working in restaurant.
- Chef cooking.
- Different actions, e.g. chopping, whisking, kneading, rolling.

## MATHEMATICS

- Using standard measures to weigh food.
- Using standard measures for liquids.
- Comparing amounts.
- Cutting food into ½, ¼, ⅛ etc.
- Portion sizes.
- Shapes, e.g. pizza, cutting vegetables.

## ART

- Printing with fruit and vegetables, e.g. potatoes, apples.
- Paper plate meals.
- Clay model meals, fruit and vegetable models.
- Creating pictures using pulses.
- Consider food pictures and food sculptures.
- Repeat patterns, e.g. making a fruit kebab.

## MUSIC

- Learn, sing and play famous songs, e.g. *Food, Glorious Food* from Oliver, *Do You Know the Muffin Man?*
- Learn and re-write *On top of spaghetti* song http://www.youtube.com/watch?v=i0jLgf8rK4c
- Use dried pasta to make musical shakers.
- Use empty food containers as sound makers / musical instruments.

## D & T

- Be able to create and follow health and safety rules for working with food.
- Design, make and evaluate a pizza, sandwich, kebab, drink.
- Design, make and evaluate menus.
- Design, make and evaluate table cloths.
- Understand and apply the principles of nutrition and apply when learning how to cook.
- Select from a range of utensils and ingredients according to their properties.
- Design and make a chef's hat, cookery apron.

## GEOGRAPHY

- Use maps to identify where food is grown locally, to locate supermarkets, greengrocers, bakeries etc.
- Use world maps, atlases and globes to identify which foods are eaten around the world, and origins of food, e.g. spaghetti.

## COMPUTING / ICT

- Using recipes online.
- Looking at ingredients using computer microscope.
- Describing and explaining changes using Easi-Speak™ mike, video.
- Using Draw, Picture to repeat patterns using food shapes.

## ROLE PLAY

**Science laboratory**

- Healthy Food Lab.
- Taste and test food.
- Classify foods.
- Classify vegetables according to parts of a plant.
- Identification posters for vegetables and fruits.
- Matching pictures, vegetable and fruit to plant.
- Tasting sessions.

## LITERACY

- Learn vegetable and flower names.
- Use recipe instructions.
- Use non-fiction books, e.g. cookery books.
- Powerful smell and taste adjectives, e.g. delicious, tasty, appetizing, scrumptious, mouth-watering.
- Think about what will happen in the cooking process.
- Listen to instructions.
- Discussing the sequence of events in the cooking process.
- Structure descriptions and explanations for how and why food is changing when cooked.
- Writing their own recipe.
- Use appropriate technical words, e.g. chop, sieve.
- Re-tell stories, e.g. *Oliver's Vegetables*, making it their own, e.g. *Class 1's vegetables.*
- Check each other's writing.

**Read**

- *Oliver's Vegetables* – Vivian French & Alison Bartlett.
- *Oliver's Milkshake* – Vivian French & Alison Bartlett.
- *Mr. Wolf's Pancakes* – Jan Fearnley.
- *Biscuit Bear* – Mini Grey.

Use children's recipe books, e.g.

- *Children's First Cookbook* – Annabel Karmel.
- *CBeebies – I can cook* – Sally Brown, Kate Morris.
- *The Children's Step-by-Step Cook Book* – Angela Wilkes.

# Topic 6 Little masterchefs

## Learning objectives

- To find out about and describe the basic needs of humans for survival (water, food and air).
- To describe the importance for humans of eating the right amounts of different types of food, and hygiene.
- To observe and describe how seeds and bulbs grow into mature plants.
- To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.

## Working scientifically skills

- To observe closely.
- To perform simple tests.
- To identify and classify.
- To use observations and ideas to suggest answers to questions.
- To gather and record data to help in answering questions.

## You will need

- Aluminium foil
- Aprons
- Bread collection
- Cleaning equipment for tables
- Cooking utensils
- Food containers
- Fruit collection
- Greaseproof paper
- Oven gloves
- Paper bags
- Paper or plastic plates
- Paper table cloths
- Plastic bags
- Shopping collection
- Table covering
- Pupil video – Nutrition – *Little Masterchefs*. Access on My Rising Stars.

### Health and safety – these activities include children:

- cooking foods – hygiene rules should be followed.
- tasting different foods – check for food allergies amongst children.
- wash hands after harvesting plants.
- cooking food that requires an oven, adult supervision is required.

For advice on cooking in school please check the ASE Be Safe! book and for further advice CLEAPSS science.cleapss.org.uk

## Scientific language

It is assumed that most children know, from their Foundation Stage experience, words such as food, fruit and vegetables, although they might not know how to write and spell them.

**Hygiene:** The things we do to keep our body clean and help stop the spread of germs.

**Key words**: bones / bread / change / chopping board / cook / dehydrate / digest / energy / fork fruit / frying pan / grow / heat / hot / hygiene / ingredients / knife / oven / rainbow / saucepan / spoon / strong / temperature / utensils / vegetables / whisk

## Prepare the classroom

### Role play

**I am a scientist**

- White laboratory coats (white shirts) for children to wear. You could limit these to, for example, four to regulate the number of children using the area.
- Children's goggles or protective glasses to wear to help them take on the role of a scientist.
- Food packets
- Food group wheels
- Books on food, health and hygiene
- Food tasting sessions
- Recording sheets

### Visitors in:

- catering, cooking, nutrition, gardening

### Visits out:

- café, bakery, butcher, greengrocer, restaurant, supermarket

## Useful websites

**Making a 'Little masterchefs' hat**

http://www.youtube.com/watch?v=URT7PFd2Qwo

http://www.youtube.com/watch?v=HPQDWoIISPg

**Sandwich designs** http://www.greatgrubclub.com/domains/greatgrubclub.com/local/media/downloads/Sandwich-fun.pdf

# Become a masterchef

## Get started

'Master chef', as the name suggests, is someone who is very good at their job, is able to run a kitchen and a team of chefs. A master chef has in depth understanding of different kinds of food, knows about ingredients, can present food so that it looks appetising and understands the science of food (what happens to cause changes).

Importantly, a master chef knows about and is in charge of safety in the kitchen (preventing cuts, scalds, burns, slips) and makes sure that hygiene is of the highest standard.

## Activities

### 1 What is a master chef?

Ask children to share what they know about chefs, and then ask them to think about what 'master chef' means. Encourage children to think of not only cooking but health, hygiene, leading and working in a team.

For this activity children's ideas could be written onto large chef hats.

Explain to children that they are going to become 'little master chefs' and learn about food, how to present food and how to be safe and hygienic, so that they can prepare food for their own special master chef picnic.

### 2 Health and safety

For this activity the class are going to think about a set of rules for working with food in the kitchen. Remind them of their cooking rules from Year 1 and ask children if they can think of any others to add. You could also remind them of the hand washing rules they created in Topic 1 'Healthy me'. Are they happy with these rules or do they think that there is something else they need to add or something that they need to change? The children then adopt these rules in their roles as 'master chefs'.

### 3 Make and wear a chef's hat

Page 22 in the Activity Resource Book helps children to design and make their chef's hat. Ask children to think about why chefs wear hats while preparing food (to prevent hair falling into food). Originally, the height of the hat represented the rank of the chef. The taller the hat, the more important the chef.

Probably the easiest material for children to use is white card and paper or crepe paper and sellotape. Encourage the children to think about what the chef's hat looks like and how they think it has been made. If children need support then there are videos on the internet, see 'useful websites' at the beginning of this topic. Once made, children should use them when preparing and cooking food along with their cookery aprons.

### 4 Getting to know....

Give children a wide range of utensils and ask them how many different ways they can sort them.

- biscuit cutters
- chopping boards
- colanders
- forks
- graters
- mashers
- measuring jugs
- measuring spoons
- mixing bowls
- rolling pins
- sieves
- spoons
- tea towels
- trays
- whisks
- oven gloves
- pastry brushes

Encourage children to make their own choices. For example, they might think about, material, forces used, job they do, size, shape, colour. You could add some categories if children do not include them, for example, wood, metal, plastic or chop, whisk, pour, and squash, twist.

## 5 Sort the shopping – keeping food fresh and safe

Explain to children that you have had food delivered from the supermarket and it needs putting away in the right place. Where possible use real food, although obviously some will have to be empty containers or fake food. The selection could include a range of food which represents the local community:

- apples
- bananas
- biscuits
- bread
- broccoli
- cheese
- eggs
- frozen peas
- ice cream
- jam
- curry sauce
- juice
- meat
- milk
- naan bread
- noodles
- potatoes
- rice
- tomato sauce

You could create a 'pretend' freezer, fridge and cupboard for children to put the food into, or sort and place on large pictures of each. Depending on what is in the shopping bags, you might need to include items such as a bread bin, banana tree or fruit bowl, since not all fresh food benefits from being placed in a cupboard, fridge or freezer.

Discuss with children their choices, asking them to explain their reasons and helping them to think through any that they may have misplaced.

## 6 Sort the shopping – eating and drinking well

In this activity the term 'balanced diet' is replaced by 'eating and drinking well'. A term which helps children to understand that we need to eat foods that help them to grow and stay healthy. They are foods that:

- give us energy. We can eat lots of bread, rice, pasta, cereals and potatoes, however not so much of chocolate, cakes and crisps.
- help the body to grow and mend itself. Examples are meat, fish, nuts and eggs.
- help the body to grow and keep bones strong. Examples are cheese, milk and yoghurt.
- good for our eyes, blood and helps us to digest food and go to the toilet. Examples are fruit and vegetables.

Ask children why they need to drink water. It will be interesting to know what they think and if they understand that, like all animals, we need water to stay alive. This is because:

- our blood is mainly water
- water gets rid of waste products out of our kidneys and livers
- it lubricates (oils) our joints
- water keeps our eyes, mouths and nose tissues moist
- it helps to keep our temperature the same.

What children should know is that as soon as they feel thirsty, it means that they are already beginning to dehydrate (dry out) and they should have a drink as soon as possible.

This activity uses the shopping again from the previous activity. Working in pairs ask the children to sort the shopping but this time into food groups, using the following labels (see above for definitions and examples) – 'Give us energy', 'Help the body to grow and mend itself', 'Help the body to grow and keep bones strong', 'Good for eyes, blood and helps us digest food and go to the toilet'.

Discuss with children how they have classified the different items from the shopping bags and ask them to think about which types of food they eat a lot of and which foods they should eat more to help them stay healthy.

In the following activities refer children back to different food groups in relation to the food that they cook.

## 7 What is ready to use from our garden?

If the children carried out the growing herbs and vegetable activities from the 'Young gardeners' topic, then there should be lots of plants ready to be harvested. In this activity children check which crops are ready to use in their cooking, and record what they find using activity sheet, 'Food from our garden' (page 23, Activity Resource Book). Children record which crops are ready and also which part of the plant they will be using, reinforcing and extending learning from Year 1 on parts of a plant.

# Let's get cooking!

## Get started

The role of the adult is to support children by asking questions, encouraging discussion and prompting children to:

- Choose – encourage children to discuss with their partner which ingredients and utensils they need to use so that they are working independently. Challenge them to explain their choices.
- Use senses – to smell, taste, look at, listen to and touch different ingredients, discussing, for example, sweet, sour or bitter tastes.
- Measure – where appropriate use standard measures with increasing accuracy and check each other's results.
- Compare – encourage children to observe similarities and differences between ingredients and utensils using their senses. They might be the material they are made from (spoons) or what they do and look like (whisks).
- Predict – what will happen when ingredients are mixed, changes that take place, how using utensils changes mixtures, dough etc. Encourage children to think about changes that will happen when mixtures are heated.
- Explore – using different utensils, changing the recipe, changing the oven temperature (adult supervised) length of time, and noting effect of what they do.

## Activities

### ❶ Design, prepare and cook a vegetable 'Pizza-licious!'

Children will make their own pizza, using the ingredients either from the herbs and vegetables they have grown from the 'Young gardeners' topic, or provided by the adult. The pizza base could either be pre-packed or dough that the children make themselves. The main science ideas to develop during this activity are, for children to be able to talk about:

- why vegetables are good for people
- where different foods come from
- how they can change the dough using forces such as squashing, twisting, stretching
- which ingredients changed the most because of the heat.

Most children will have eaten pizza, so you should be able to draw upon their experiences. Ask them to discuss what they know about pizzas with their partner or in their group and then share one thing from their group with the rest of the class.

The adult could scribe children's comments on a large pizza on a display or interactive whiteboard. At this stage you could share a pizza recipe with them to compare with the ideas they have shared.

Engage children in discussing where the different ingredients come from, for example, the pizza dough is flour which comes from wheat, cheese from cow's milk, herbs from plants, carrots are a root, bell peppers a fruit, onions a bulb. If you have your own school vegetable patch, take the children out so that they can think about which of the vegetables and herbs they could use from their garden to make a pizza. This could include handling the herbs to see which ones they recognise from smelling pizza. Then, give each child a paper plate or large circle of paper and ask them to design their own vegetable 'Pizza-licious!' using either ingredients from the garden, or provided by the adult.

When children have planned their pizza and discussed where the ingredients come from

and their nutritional value, then give children an amount of pre-prepared pizza dough. If children are making their own dough, then discuss with children how they can change the shape of the dough, using forces such as squashing, twisting and stretching. Then explain that they are going to follow their own design to make their pizza using the ingredients that they have chosen. Cooking is usually around 200–220°C for 10–15 minutes, after which they can share and eat.

Before and after children have eaten the pizza, they could:

- take photographs.
- write comments on a 'Pizza Poster'. What did they think of their pizza? Did they grow their own vegetables and herbs? What do they think of it and how did it make them feel?
- compare the pizza before and after. What are the similarities and differences?
- talk about which ingredient has changed the most.

## 2 Mixed leaf salad

To begin with children should explore different lettuce leaves that have been grown, which could include:

- cos
- iceberg
- lamb's lettuce
- little gem
- oak leaf lettuce
- red chard
- rocket
- romaine
- web

Encourage children to use all of their senses to discuss the similarities and differences between them. They might observe colour, shape, taste, thickness and size. Talk with children about how lettuce helps fight disease and keeps our eyes healthy.

## 3 Design your own salad

There are many recipes for salad, but the best one is where children choose their own ingredients. They could, for example, create a salad that has mixed lettuce leaves, using those leaves they like the best. You could also refer children back to Topic 1 'Healthy me' and ask them what they remember about rainbow colours in food. The children could then think about creating a 'Rainbow Salad' using crops they have grown and some that the adult might provide, e.g. tomatoes, bell peppers, broccoli, grated carrots, raisins.

Talk about how just eating salad might not be balanced, and extend children's understanding of different food groups by introducing, for example, cheese which is good for bones, the memory and the heart.

Finally the children should decide how to keep their salad fresh for their picnic.

## 4 Carrot and courgette muffins

The aim of the recipes is to show how many different ways food from the garden can be cooked. So far we have had pizza and salad. In this recipe the children cook muffins, which are usually seen as a sweet cake. Here, they are savoury, but just as tasty.

As children use the page 24, Activity Resource Book, for carrot and courgette muffins, ask them to think about the different ingredients, for example:

- How does it help the body?
- Where does the food come from? Which part of a plant? Is it from an animal?

As children prepare and cook the muffins encourage them to talk with their partner about the changes that take place.

- How do foods change? E.g. grating carrots and courgettes, whisking an egg, adding milk and oil.
- What are the differences between uncooked and cooked?
- Which ingredient do you think causes the mixture to rise so the muffins are big?
- What do you think would happen if we did not include baking powder?

The children should decide how to keep their courgette muffins for their picnic, so that they stay fresh and do not get squashed.

## 5 Bread tasting

Refer children back to the different food groups, asking them why bread is a good thing to eat (as with all foods in moderation). Arrange a bread tasting session, offering children 1cm – 2 cm cubes of bread to try. Here are some of the more common breads to be found in food stores, that represent as well as introduce children to bread from different countries and cultures:

- bagels
- ciabatta
- focaccia
- granary
- naan
- pitta

- rye bread
- soda bread
- tortilla
- wholegrain
- wholemeal

As children try each type of bread, they complete page 25 of the Activity Resource Book, 'Tasting Breads', where children use their senses to explore each bread and record their observations.

- Which bread do children already know?
- What have children found out about bread?
- Which is their favourite new bread? What do they like about that bread?
- What kind of food do they think would go well with different kinds of bread?
- Which bread will they choose for their sandwich?

## 6 Keeping bread fresh

Be careful not to place too much emphasis on the idea that stale bread is bread that has dried out, because the answer is more complex. More important is to engage children in a problem solving activity which involves a simple fair test.

The children know that they will be going on a picnic and keeping bread fresh will be important. Children could work in pairs or small groups and share their ideas about what happens to bread if it is left out and how they could keep their bread fresh for the picnic.

Give children a choice of wrappings and challenge them to plan a simple test to find out which one keeps the bread fresh the longest. You could use a paper bag, plastic bag, greaseproof paper and aluminium foil and no wrapping at all.

Encourage children to think about:

- What do we want to find out?
- What do we think we will do?
- What will we need?
- How will we keep it fair?
- What should we measure?
- What is the answer to our question?
- How will we tell other people what we did and what we found out?

## 7 Design and make a sandwich

Children design and make a sandwich using the bread that they have chosen from the bread tasting activity. Aim to offer children a range of fillings that represent the different food groups. Ask children to make a sandwich that will keep them healthy. They can include meat, boiled eggs and produce from their garden, such as chives, cress, lettuce, tomatoes, and spring onions.

Children explain how they made their sandwich and what makes it healthy. Create a sandwich book using page 26 of the Activity Resource Book. Once made, they wrap their sandwich in the material they found to be best for keeping it fresh, ready to take to the picnic.

## 8 Fruit choice

Give children a small pot and allow them to taste and choose a five-piece rainbow fruit salad to take on their picnic. You could offer:

- apple
- grapes
- kiwi fruit
- mango
- melon
- orange
- pear
- pineapple
- raisins
- strawberries

Children could also make lemonade to take on the picnic (page 27, Activity Resource Book).

## 9 Plan and have a picnic

The food is ready. Now ask children what else they will need to think about if they are going on a picnic. They can write their ideas on white paper table cloths or draw what they will need.

### Support and extend

- **Support:** Provide children with different coloured salad items and ask them to choose four things from the rainbow colours, e.g. green (lettuce, cucumber, parsley), red (pepper, tomatoes), yellow (peppers), orange (carrots, peppers), purple (cabbage, beetroot), white (cabbage, spring onions) and ask them to choose things that are these colours to put in their salad.
- **Extend:** Some children might notice that if they cut lettuce with a metal knife it goes brown at the edges. Challenge children to find ways of cutting lettuce so that the edges don't discolour. Does this happen with all vegetables? The answer is to either tear with hands or to use a plastic knife.

# Assess the topic

Now you have reached the end of the 'Little masterchefs' topic. Use the statements below to assess the children in your class. Assess them further with the interactive activity, 'Little masterchefs', available on My Rising Stars.

## Some children can ...

- ask and answer their own questions about different kinds of food and personal health.
- use secondary sources of information to find out more about different food groups and scientific names, e.g. carbohydrates, protein.

## Most children can ...

- explain how different foods help the body to keep healthy.

## All children can ...

- plan and carry out a simple comparative test.
- use results to answer their question and choose the best material for the job, e.g. keeping a sandwich fresh.
- classify food into groups.
- say what they need to eat and drink to stay alive and healthy.
- follow hygiene and safety rules when preparing and cooking food.
- choose foods that help to keep the body healthy.
- know the names of foods they have grown from seed.
- know which part of a plant they are eating.