

FOOD PREPARATION



Planetary mixer

With interchangeable bowls and mixing attachments, this mixer is very versatile. The three main mixing attachments are: **paddle** for general mixing, **wire whisk** for cream and egg whites, **dough hook or arm** for kneading yeast doughs. There are table and floor models available.

Double arm mixer

The two pronged arms move up and down into the bowl, lifting the dough and aerating it well. These mixers are very 'sturdy' and are perfect for making yeast doughs. **Spiral mixers** and **fork mixers** are also used for mixing and kneading yeast doughs as they are able to make a very elastic dough without overheating it.



Proofing cabinet

A chamber where you can set the ideal temperature and humidity for the fermentation of yeast doughs.

Retarder

A chamber to refrigerate yeast dough in order to slow down the rate of fermentation so that the dough can be stored. There is a high level of humidity to prevent the dough from drying out and forming a crust. There is also a single appliance – a **retarder proofer** – to alternate between refrigeration and proofing modes in the same unit.



HAVE SOME MORE

Other useful equipment for bread making: a **divider**, to cut the same size pieces, for making rolls for example; a **divider-roller** which cuts the pieces of dough and rolls them into shape; a **dough sheeter** to roll out dough into sheets of uniform thickness; and a **moulder** to roll and shape dough into standard shapes such as baguettes, loaves or rolls.



COOLING

Ice cream maker/freezer (or batch freezer)

for 'churning and freezing ice creams and sorbets. It has a **horizontal or vertical cylinder** which is refrigerated to very low temperatures and a **paddle**. This scrapes the freezing mixture off the walls of the container and incorporates air into the mix at the same time.



'sturdy' robust

BAKING AND COOKING



Ovens are probably the most important piece of equipment in a bakery or patisserie. There are several types in order to ensure perfect baking conditions for different types of bread, cakes, biscuits, pastries and other items. The most common are **static ovens**, **convection ovens** and **ovens with steam injectors**, especially important for baking bread. **Combi ovens** combine three modes of cooking – steam, convection and a combination of both – into one unit. For high volume bakeshops, you can get **rack ovens**, to hold entire racks of sheet pans, and **revolving ovens**, where multiple 'sheet pans are rotated inside the oven, eliminating problems of hot spots and uneven baking.

Table top steam kettle for making custards, creams and fillings. They are made of steel with double walls between which steam circulates to quickly and efficiently heat the liquid. Some versions 'tilt and have a 'lip for easy pouring.



Fryer for frying items like doughnuts and fritters.



Pasteuriser used to pasteurise custard, crème and ice cream mixtures. By heating the contents up to 100°C, pasteurisation reduces bacteria and allows for longer storage, while maintaining the nutritional values of the food.




Read the texts again and write the name of the appliance(s) for the following tasks.

- 1 kneading dough
- 2 slowing down the fermentation of dough
- 3 baking cakes, pastries and bread
- 4 making custard
- 5 making cake batter
- 6 heating creams and mixtures to reduce bacteria

Complete these sentences with the verbs in the box.

churn – ferment – freeze – heat – knead – pour

- 1 The dough arm attachment in a planetary mixer is used to _____ dough.
- 2 A proofing cabinet is used to _____ yeast doughs.
- 3 An ice cream maker is used to make and _____ ice cream and sorbets.
- 4 The paddle in an ice cream maker is used to _____ the mixture and incorporate air.
- 5 A steam kettle is used to _____ liquids and cook things like custard.
- 6 The lip on a steam kettle is used to _____ the contents into another container.

 **2.17 Now listen to this presentation and complete the sentences with the missing information.**

- 1 3D printing technology for food has existed since about _____.
- 2 It is used for _____ main purposes in the kitchen.
- 3 You can use 3D printing to make something _____, like a decoration.
- 4 _____ is one of the easiest substances to use in a 3D printer.
- 5 Some chefs are using 3D printing to make _____ for incredible desserts.
- 6 According to many chefs, 3D printing cannot replace the _____ of the pastry chef.

Name	Use/Description
apple corer	To take the ⁴ core out of apples and pears.
biscuit and pastry cutters	To cut shapes in pastry and biscuit dough. They can be smooth, ² fluted or ³ novelty shaped.
blowtorch	To brown and caramelise, for example the sugar topping on crème brûlée.
chinois	Also called a conical strainer, it has a fine mesh to strain sauces.
drum sieve	To sift flour and other dry ingredients.
ice cream scoop	Used for serving ice cream, but also for making equal-sized portions of cake batter and biscuit dough.
icing comb	To make decorative patterns on icing.
palette knife	With a long flexible blade with a rounded end to ⁴ scrape out bowls and spread icing or fillings on cakes.
pastry bag and tips / nozzles	A bag made of cloth or plastic which can be fitted with tips of various shapes and sizes used for piping pastry and biscuit dough, filling cooked pastries and decorative work.
pastry brush	To brush items with egg wash or glaze.
pastry wheel	To make long cuts in dough and pastry. It can have a straight or fluted edge.
roller docker	To pierce holes in rolled out dough or pastry to prevent bubbles forming during baking.
rolling pin	Made of wood or stainless steel and used to roll out pastry. Textured rolling pins are used to ⁵ emboss designs on fondant icing, marzipan etc.
spatulas and scrapers	Made of metal, plastic or silicon and used to scrape out bowls or spread mixtures and fillings.
thermometer	To test the temperature of liquids, sugar and chocolate.
whisk	To aerate eggs and cream.
wire rack	For cooling, as well as glazing and confectionery work as the excess glaze or chocolate can run off.
zester	To remove the ⁶ zest from citrus fruits.

Name the objects:



1 _____



2 _____



3 _____



7 _____



8 _____



9 _____



13 _____



14 _____



15 _____



4 _____



5 _____



6 _____



10 _____



11 _____



12 _____



16 _____



17 _____



18 _____

Bakeware and moulds

Depending on what type of baking you are doing, you will need a good selection of baking tins. This should include a **loaf tin** for baking loaf cakes like apple and walnut; a **Swiss roll tin** for Swiss rolls, tray bakes and shortbread; **cupcake tins** in different sizes for smaller fairy cakes and larger muffins; **tart and tartlet tins** with a removable bottom for making tarts or single-portion tartlets, and **sponge tins**, shallow tins used for making two sponges which are then sandwiched together. For an all-in-one cake or a deeper cake, a **spring form cake tin** is useful because it has a removable bottom and the outer ring opens up to facilitate removing the cake. You might also need some **novelty tins** (animals, hearts, numbers and so on) for special occasion cakes. Different shaped **metal cones** are used for making cream horns, *cannoli* and wafers.

Baking tins are usually made of metal (stainless steel or aluminium) and may have a non-stick coating such as Teflon. It is also possible to find **silicon bakeware and moulds**. These come in various shapes and sizes and have the advantage that, as well as for baking, they can also be used for refrigerated or frozen desserts, like mousses or bombes.

Metal cake or food rings, often found in individual portion sizes, are used both in the oven and when preparing cold desserts too. In addition, they can be used to maintain a shape when plating up.



1 Read the text and match the names in bold of the different types of tin to the correct pictures.



1 _____



2 _____



3 _____



4 _____



5 _____



6 _____



7 _____



8 _____



9 _____



10 _____

Work in pairs. You are two commis chefs prepping for the pastry chef. Choose an item from the menu and decide the necessary equipment for the *mise en place*.

A For the cupcakes we need cupcake tins.

B Yes, and for decorating them with buttercream we need pastry bags and tips.

Dessert Menu

puff pastry petits fours • apple strudel • opera cake
pear almond tart • cupcakes with pistachio buttercream