LESSON 3

# WEIGHING AND MEASURING INGREDIENTS

## Learning Outcomes

**By the end of this lesson you will be able to:**

- identify measuring equipment and tools
- give examples of solid and liquid ingredients
- demonstrate skills in using the right equipment and techniques to measure ingredients accurately

**Note to teacher**

Teacher will need to display measuring equipment and tools for students at the start of the lesson.

## 3.1 Introduction

Food preparation becomes successful when using the correct amount of ingredients as stated in a recipe. To get the right amount of ingredients, it is important to weigh or measure the ingredients accurately by using a **measuring equipment**.

It is also important to understand and apply the correct techniques when weighing and measuring the ingredients.

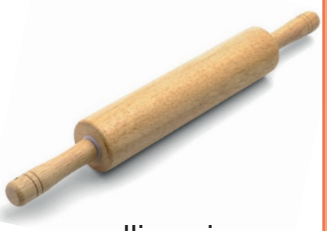
## Stimulus

The teacher may brainstorm different measuring equipment that students have learnt in lesson 2.

## Activity 3.1: Identification of measuring tools

***Help students to complete Activity 3.1 in their workbook.***

**Study the pictures below and identify the correct measuring tools. Shade the appropriate box.**

| | | |
|---|---|---|
|  measuring spoons ■ |  peeler ☐ |  tablespoon (Tbsp) ■ |
|  frypan ☐ |  measuring jug ■ |  rolling pin ☐ |
|  teaspoon (Tsp) ■ |  kitchen scale ■ |  electronic scale ■ |

## 3.2 Solid and liquid ingredients

**TEACHING POINT**

- **Solid ingredients** such as sugar, flour and rice are measured by using a kitchen scale, cups or spoons.

- **Liquid ingredients** such as water, milk and oil are measured by using a measuring jug or measuring spoons or even cups.

### 3.2.1 Examples of solid ingredients


*Table 3.1: Solid ingredients*

### 3.2.2 Examples of liquid ingredients

## Activity 3.2: Identification of solid and liquid ingredients

***Help students to complete Activity 3.2 in their workbook.***

**Classify the foods given below in the appropriate column.**

***Rice - Milk - Oil - Sugar - Salt - Water - Flour***

| Solid ingredients | Liquid ingredients |
|---|---|
| Rice<br>Sugar<br>Salt<br>Flour | Milk<br>Water<br>Oil |

## Activity 3.3: Groupwork - Using the measuring spoons

### *Instructions to teacher*

1. Divide the class into groups depending on size number

2. Demonstrate how to measure:
   a. a level tablespoon or teaspoon
   b. a rounded tablespoon or teaspoon
   c. Measuring spoon sets can be used if available.

**Measuring equipment needed:** Measuring spoon sets, tablespoon, teaspoon.

**Ingredients needed:** 100 g sugar, 100 g flour, 25 g salt, 100 ml water and 100 ml oil.

**Method**

Use the appropriate measuring spoons to measure:

- 1 teaspoon (tsp) of salt
- ¼ teaspoon (tsp) of salt
- 1 heaped tablespoon (Tbsp) of sugar
- ½ tablespoon (Tbsp) of sugar
- 1 tablespoon (Tbsp) of water
- 1 teaspoon (tsp) of oil/vanilla
- 2 level tablespoons (Tbsp) of flour

**Level spoon**

*Use a knife to even off the top to obtain a level tablespoon or teaspoon.*

**A heaped spoon**

*Some recipes call for heaped or level spoons, so it is wise to know how to measure accordingly.*

**Complete the following table by putting a tick (✓) in the appropriate column.**

| No. | Measurement of ingredients | Completed | Not completed |
|---|---|---|---|
| 1 | ½ teaspoon (tsp) of salt | | |
| 2 | 1 heaped tablespoon (Tbsp) of sugar | | |
| 3 | 1 tablespoon (Tbsp) of water | | |
| 4 | 1 teaspoon (tsp) of oil/vanilla | | |
| 5 | 2 level tablespoons (Tbsp) of flour | | |

## 3.3 Measuring solid ingredients

**TEACHING POINT**

- **Solid ingredients such as flour, sugar and rice are best measured using a kitchen scale.**

- **Household measures such as teaspoon (tsp) and tablespoon (Tbsp) can also be used to measure both solid ingredients if smaller quantities are used.**

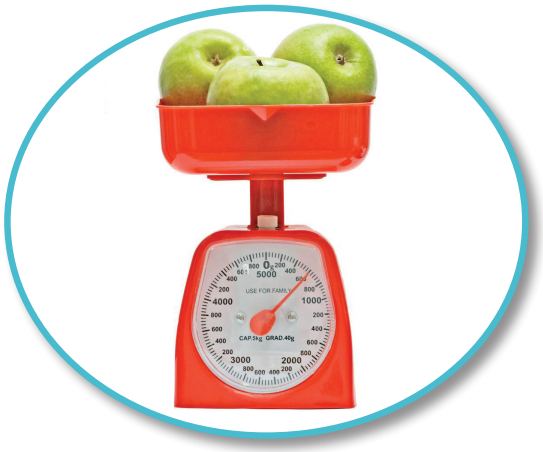


*Fig.3.1: Kitchen scale*

*Fig.3.2: Electronic kitchen scale*

### Activity 3.4: Using a kitchen scale or an electronic scale

***Instructions to teacher***

- Organise the class for groupwork depending on class size.

- Provide each group with flour and measuring equipment.

- Allow students to work in groups to weigh the following amount of flour:
  - 250 g of flour
  - 150 g of flour
  - 100 g of flour
  - 50 g of flour

Complete the following table by putting a tick (✓) in the appropriate column.

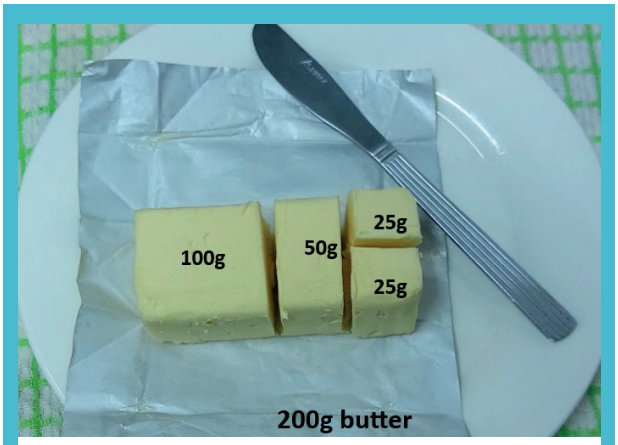
| No. | Measurement of flour | Completed | Not completed |
|---|---|---|---|
| 1 | 250 g of flour | | |
| 2 | 125 g of flour | | |
| 3 | 100 g of flour | | |
| 4 | 50 g of flour | | |
| 5 | 125 g of flour | | |

## 3.4 Measuring butter

**There are various ways to measure butter in food preparation such as by dividing, cutting into pieces and by using a kitchen scale.**

Cut the amount of butter you need. If your butter wrapper has measurements, then you can easily know the amount you will have to cut. If your butter wrapper does not have markings, take a ruler and measure the stick of butter. Then gently press a knife into the butter to mark the halfway point.


Check the butter wrapper for measurements. Some butter wrappers have printed measurements as in the picture. These help to measure out the butter for recipes.




You can also cut the block of 200g butter into half then in pieces as shown in the picture above.

Use a greaseproof paper on the kitchen scale or electronic kitchen scale and transfer the butter onto it.

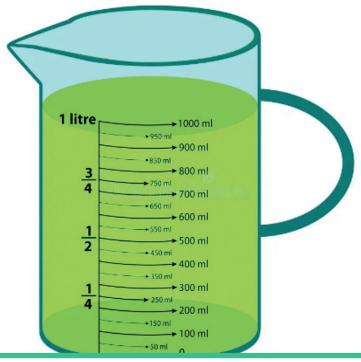
Scoop the butter using a spoon and transfer to the bowl using another spoon.

## 3.5 Measuring liquid ingredients

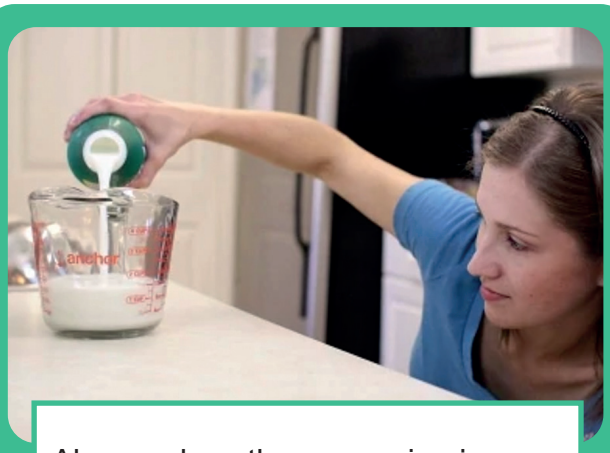
A measuring jug is used to measure liquids. Liquids are usually measured in millilitres (ml). Some measuring jugs have both millilitres (ml) and litres (L) measurement.

### Points to consider when reading the amount of liquid


Do not hold the measuring cup in your hand and try to raise it to eye level. This will give you a wrong reading.




Point to the measuring mark and pour the amount of liquid needed. Do not look inside the jug to read the measurement.



Always place the measuring jug on a flat surface and bend down so that your eye is level with the amount of liquid you require.


Eye level

## Activity 3.5: Using the measuring jug

### *Instructions to teacher*

- Organise the class for groupwork depending on class size.
- Provide each group with water and different measuring equipment such as measuring jug and a set of measuring spoons.

- Allow students to work in groups to measure the following amounts of water:
  - 500 ml
  - 250 ml
  - 200 ml
  - 50 ml
  - 25 ml
  - 15 ml
  - 10 ml
  - 5 ml

**Complete the following table by putting a tick (✓) in the appropriate column.**

| No. | Measurement of water | Completed | Not completed |
|---|---|---|---|
| 1 | 500 ml | | |
| 2 | 250 ml | | |
| 3 | 200 ml | | |
| 4 | 50 ml | | |
| 5 | 25 ml | | |
| 6 | 15 ml | | |
| 7 | 10 ml | | |
| 8 | 5 ml | | |

## Activity 3.6: Measuring equipment

**Write the name of the measuring equipment you will use to weigh and measure the following ingredients.**

| No. | Ingredients | Measuring equipment |
|---|---|---|
| 1 | 1 tsp salt | |
| 2 | 100 g sugar | |
| 3 | ½ tsp vanilla essence | |
| 4 | 250 ml milk | |
| 5 | 2 Tbsp oil | |
| 6 | 150 g butter | |
| 7 | 450 g flour | |

**The answers for activity 6 have been given below.**

| No. | Ingredients | Measuring equipment |
|---|---|---|
| 1 | 1 tsp salt | *Measuring spoons/ Teaspoon* |
| 2 | 100 g sugar | *Kitchen scale or electronic kitchen scale* |
| 3 | ½ tsp vanilla essence | *Measuring spoons* |
| 4 | 250 ml milk | *Measuring jug* |
| 5 | 2 Tbsp oil | *Measuring spoons/ Tablespoon* |
| 6 | 150 g butter | *Kitchen scale or electronic kitchen scale* |
| 7 | 450 g flour | *Kitchen scale or electronic kitchen scale* |