



Primary Three – term 1

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Time, t, is now!!!

PRIMARY THREE

TERM 1

THEME 1: OUR SUB-COUNTY/DIVISION

Expected learning outcome: The child understands different ways of locating places and appreciates the various social groups in the Sub-County/Division.

1.1 Name and location of our Sub-county / Division

Name of Our Sub-county/Division

Name: (Teacher should insert the actual name of the local sub-county/division, e.g., *Makindye Division*).

It is part of the district and has several parishes and villages.

Difference Between a Map and a Picture

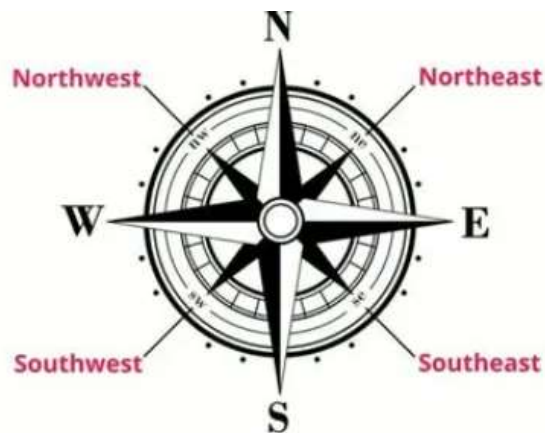
Map: A drawing that shows places, features, and directions using symbols.

Picture: A photograph that shows how a place looks in reality.

👉 Example: A map of a school shows classrooms as boxes, while a picture shows the real buildings.



Compass Directions – Cardinal Points



- **North (N)** → Upwards on most maps.
- **East (E)** → Where the sun rises.
- **West (W)** → Where the sun sets.
- **South (S)** → Downwards on most maps.

Location of Our Sub-county/Division

The sub-county/division is located **within the district**.

It is bordered by **neighboring parishes or villages** (teacher should insert actual names, e.g., *Parish A to the north, Parish B to the south*).

Compass directions help us describe its position in relation to others.

Exercise 1.1.1

1. What is the difference between a map and a picture?
Answer: A map shows places using symbols, while a picture shows how a place looks in reality.
2. Name the four cardinal points.
Answer: The four cardinal points are North, East, West, and South.
3. Where does the sun rise?
Answer: The sun rises in the East.
4. Why is a map important?
Answer: A map is important because it helps us locate places and know directions.
5. How can we describe the location of our sub-county?
Answer: We can describe the location of our sub-county by using compass directions and naming neighboring parishes.

Teaching Tip: Pupils can draw a simple sketch map of their sub-county/division, label neighboring parishes, and mark the cardinal points.

Money-Generating Occupations

These are jobs that bring income to families and help the community grow.

- (i) **Trading** – Selling goods in shops and markets.
- (ii) **Tailoring** – Making clothes for people.
- (iii) **Entertainment** – Musicians, dancers, and actors earn money while preserving culture.
- (iv) **Pottery / Brick Making** – Producing pots and bricks for homes and buildings.
- (v) **Carpentry** – Making furniture such as chairs, tables, and doors.

- (vi) **Weaving / Knitting** – Producing baskets, mats, ropes, and sweaters.

Subsistence Activities (Common in the Community)

These are activities done mainly to support families, sometimes with little income.

- (i) **Casual Laboring** – Helping on farms or construction sites for small pay.
- (ii) **Farming / Animal Rearing** – Growing crops like maize, beans, bananas, and keeping goats, cows, or chickens.
- (iii) **Cookery** – Preparing food for families or selling meals in small restaurants.

Importance of Different Activities in our subcounty

- (i) Provide income for families.
- (ii) Supply food, clothes, and goods to the community.
- (iii) Create employment opportunities.
- (iv) Preserve traditional skills and culture.
- (v) Promote development through services and taxes.

Exercise 1.1.5

1. **Name two money-generating occupations in our sub-county.**

Answer: Trading and tailoring are two money-generating occupations in our sub-county.

2. **What is casual laboring?**

Answer: Casual laboring is helping on farms or construction sites for small pay.

3. **Mention two items made by carpenters.**

Answer: Carpenters make chairs and tables.

4. **Why is farming important in the community?**

Answer: Farming is important because it provides food and supports families.

5. **How can cookery be practiced in schools?**

Answer: Cookery can be practiced by measuring ingredients with cups, spoons, tins, and bottles to prepare simple meals.

Teaching Tip: After the lesson, let learners role-play occupations (e.g., a tailor sewing, a carpenter making a chair, a cook preparing food). This makes the topic lively and memorable.

Mathematics Competences 1.1

Exercise 1.1.2

1. Counting 0-999
2. Write figures from
 - (i) 110 – 120
 - (ii) 451 – 506
 - (iii) 734 – 747
 - (iv) 950 – 970
 - (v) 61 – 81
3. Construct a compass

Sets

Set terms

Term	Meaning	Example
Set	A group of things that are alike.	Set of fruits $\rightarrow$ {apple, banana, orange}
Element / Member	Each item in a set.	Apple is an element in {apple, banana, orange}.
Empty Set	A set with no items.	{ } or $\emptyset$
Finite Set	A set with a countable number of items.	{1, 2, 3, 4, 5}
Infinite Set	A set that goes on without end.	{1, 2, 3, 4, ...}
Subset	A set that is part of another set.	{banana, orange} $\subset$ {apple, banana, orange}
Universal Set	The set that contains all items under discussion.	All fruits = {apple, banana, orange, mango, pineapple}
Union of Sets	All items from two sets combined together.	{cow, goat} $\cup$ {goat, hen} = {cow, goat, hen}
Intersection of Sets	Items that are common in two sets.	{cow, goat} $\cap$ {goat, hen} = {goat}

Exercise 1.1.3

Answer in full sentences:

1. What is a set?
2. Name one element in the set {apple, banana, orange}.
3. What do we call a set with no items?
4. Which set is a subset of {cow, goat, hen}?

5. What is the difference between union and intersection of sets?

Answers

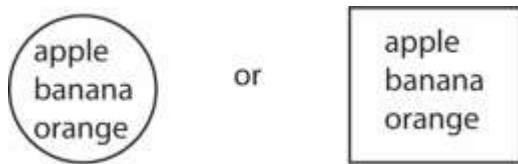
1. A set is a group of things that are alike.
2. One element in the set {apple, banana, orange} is apple.
3. A set with no items is called an empty set.
4. {goat, hen} is a subset of {cow, goat, hen}.
5. Union combines all items from two sets, while intersection shows only the items common to both sets.

Teaching Tip: Draw circles on the board to show sets, subsets, unions, and intersections. Pupils can use pictures or real objects to place inside the circles for better understanding.

Steps to Draw a Set

1. Draw a **circle or rectangle**.
2. Write the **name of the set** outside or on top.
3. Draw or write the **elements** inside the shape.
4. Make sure all elements belong to the same group.

Example a set of fruits can be represented as



Practice Activity

Draw the following sets in your exercise book:

1. Set of classroom objects.
2. Set of domestic animals.

3. Set of colors.
4. An empty set.

Teaching Tip

Use bottle tops, sticks, or pictures to represent elements. Pupils can group them physically before drawing the sets on paper.

How to Estimate Distance

Estimating distance means **guessing how far or near something is** without using exact measurements. We use words like:

- **Near** → close to us
- **Far** → a long way from us
- **Short** → covers little space or takes little time
- **Long** → covers more space or takes more time

Examples

- (i) The chalkboard is **near** the teacher's table.
- (ii) The school gate is **far** from the classroom.
- (iii) Walking to the playground is a **short** distance.
- (iv) Walking to the market is a **long** distance.

Classroom Activities

- Ask pupils to point to something **near** (like the desk) and something **far** (like the gate).
- Compare two sticks: one **long**, one **short**.
- Role-play: "John walks a short distance to the shop, but Mary walks a long distance to the town."

Exercise 1.1.4

Answer in full sentences:

1. What does estimating distance mean?
2. Which word describes something close to us?
3. Which word describes something a long way from us?
4. Give one example of a short distance.
5. Give one example of a long distance.



Answers

1. Estimating distance means guessing how far or near something is without exact measurement.
2. The word *near* describes something close to us.
3. The word *far* describes something a long way from us.
4. Walking from the classroom to the playground is a short distance.
5. Walking from the village to the town is a long distance.

Teaching Tip: Take pupils outside and ask them to show something near (like a tree close by) and something far (like a hill in the distance). This makes the lesson practical and easy to understand.

Literacy Competences 1.1

Exercise 1.1.5

1. Distinguish between a map and a picture.
2. Identifying the cardinal points of a compass
3. Write examples of villages in your subcounty
4. Write capital letters correctly from A – Z.
5. Draw a map of your school

Exercise 1.1.6

Read the story and answer the questions that follow with full sentences

Story: *The Background of Our Sub-county*

Long ago, people began settling in our sub-county because the land was fertile and good for farming. Families built homes near rivers and hills, where they could find water and firewood. As the population grew, leaders were chosen to guide the community and keep peace.

Over time, schools, markets, and health centers were built to serve the people. Roads were made to connect villages, making it easier to trade and visit neighbors. The sub-county became an important part of the district because it brought together many families, cultures, and occupations. Today, our sub-county continues to grow and provide services that help people live better lives.

Questions

1. Why did people first settle in the sub-county?

Answer: People first settled in the sub-county because the land was fertile and good for farming.

2. Where did families build their homes in the past?

Answer: Families built their homes near rivers and hills to get water and firewood.

3. Who was chosen to guide the community as it grew?

Answer: Leaders were chosen to guide the community and keep peace.

4. What services were later built in the sub-county?

Answer: Schools, markets, and health centers were later built in the sub-county.

5. Why is the sub-county important in the district today?

Answer: The sub-county is important because it brings together families, cultures, and occupations and provides services for better living.

Teaching Tip: Pupils can draw a timeline showing the development of the sub-county: settlement → leaders → schools/markets → roads → modern services. This helps them visualize how communities grow over time.

English (non-medium) Competences 1.1

Exercise 1.1.7

Write a sentence using each of the following vocabulary: On, in, door, behind, in front of, near, cupboard, book, table, at the side of, North, East, West, South, opposite, right, above, sunrise, sunset, sub-county, division

Example of sentences: (can used for reading practices)

1. The book is **on** the table.
2. There is milk **in** the cup.
3. The teacher opened the **door** slowly.
4. The playground is **behind** the school.
5. The church is **in front of** the market.
6. The shop is **near** the road.
7. The plates are kept in the **cupboard**.
8. I am reading a **book** about animals.
9. We put the food on the **table**.
10. The tree is **at the side of** the house.

New Vocabulary Sentences

11. Kampala is in the **North** of our district.
12. The sun rises in the **East**.
13. The sun sets in the **West**.
14. Tanzania is to the **South** of Uganda.
15. The school is **opposite** the hospital.
16. The shop is on the **right** side of the road.
17. The bird is flying **above** the tree.
18. We watch the **sunrise** in the morning.
19. We see the **sunset** in the evening.
20. Our **sub-county** has many hills and rivers.

21. The **division** is made up of several parishes.

Teaching Tip: Ask pupils to underline the vocabulary word in each sentence, then draw a simple picture to match it (e.g., a sun for *sunrise*, a cupboard for *cupboard*, a compass for *North*). This helps them connect words, meaning, and visuals.

Exercise 1.1.8

Write questions and corresponding answers using the following structures

1. Where is the ...(book/table)?
 The ... is (near, on, in, opposite) the house/tree.
 It is (near, on, in, opposite) the ... (table /cupboard/door).
 Example
 (i) Where is the book?
 It is on the table.
 (ii) Where is the table?
 It is near the cupboard.
2. Is the ... (house/tree) (near, in, opposite) the (church, school)?
 Yes, it is.
 No, it is not.
3. Where does the sun (rises, set)?
 It ... (rises, sets) in the ... (East/West).
4. What direction is the ... (church, mosque)?
 The ... (church, mosque) is in the ... (North, West).
 It is in the (East/West).

Exercise 1.1.9

Find out whether pupils can obey command like:

- (i) Turn ... (left, right, north, east,).
 I am turning to the ... (left, right, North).
- (ii) Do not turn ... (left, right).

Exercise 1.1.10

Write five sentences about the picture below:



Example

Men on the farm wear hats.

Exercise 1.1.10

Read the dialogue below and answer the questions that follow:

Dialogue: *Economic Activities in Our Sub-county*

Teacher: Good morning, class. Today we shall talk about economic activities in our sub-county. Can anyone tell me one activity people do to earn money?

Bbosa: People in our sub-county grow crops like maize, beans, and bananas.

Teacher: Very good. Farming is an important economic activity. What else do people do?

Ester: Some people are traders. They sell goods in shops and markets.

Teacher: Excellent. Traders help us to get the things we need. Can someone add another activity?

Mark: Teachers also work in schools to educate children.

Teacher: That is true. Teaching is an economic activity because teachers earn money for their work.

Moses: Fishermen catch fish from rivers and lakes.

Teacher: Well done. Fishing provides food and income. We also have carpenters, tailors, and craft makers who make furniture, clothes, and baskets. All these activities help our sub-county to develop.

Questions

1. **Name two crops grown by farmers in the sub-county.**

Answer: Farmers in the sub-county grow maize and beans.

2. **What do traders do in the market?**

Answer: Traders sell goods to people in the market.

3. **Why is teaching an important economic activity?**

Answer: Teaching is important because teachers educate children and earn money for their work.

4. **Mention one product provided by carpenters.**

Answer: Carpenters provide furniture such as chairs and tables.

5. **Why are economic activities important in a sub-county?**

Answer: Economic activities are important because they provide income, goods, and services, and help the sub-county to develop.

Teaching Tip: After the dialogue, let pupils role-play as farmers, traders, teachers, and carpenters. This makes the lesson lively and helps them remember the different economic activities.

Exercise 1.1.11

Complete the following questions with appropriate word(s):

1. Farmers in our sub-county grow _____ and beans to earn money.

2. Traders sell goods in the _____ to help people get what they need.

3. Teachers work in _____ to educate children and earn a living.

4. Fishermen catch _____ from rivers and lakes for food and income.

5. Carpenters make _____ such as chairs and tables for the community.



Suggested Answers (for teacher use)

1. Maize, banana, mango trees, Irish potatoes etc.
2. Market, shop
3. schools
4. fish
5. furniture

Teaching Tip: You can write the sentences on the chalkboard and let pupils fill in the blanks orally first, then in their exercise books. To make it fun, turn it into a quiz competition between groups.

Creative Performing Arts 1.1

1. Sing a song about our sub county / division below

Song: *Our Sub-county, Our Home*

(Tune suggestion: simple call-and-response or clap rhythm)

Verse 1

In our sub-county we live,
Farming, trading, all we give.
Teachers teach and children learn,
Fishermen catch fish to earn.

Chorus

Our sub-county, our home,
Where we work and where we roam.
Together we grow, together we share,
Our division shows we care.

Verse 2

Carpenters build, tailors sew,
Markets are busy, crops will grow.
Neighbors help and leaders guide,
Peace and unity side by side.

Chorus (repeat)

Our sub-county, our home,
Where we work and where we roam.
Together we grow, together we share,
Our division shows we care.

Teaching Tip:

- Pupils can clap or drum lightly on desks during the chorus.
- For signing, let them use simple hand gestures:
 - Point to the ground for “sub-county.”
 - Make a book shape with hands for “teachers teach.”
 - Pretend to row for “fishermen.”
 - Stretch arms wide for “together we grow.”

This way, the song becomes both musical and visual, helping learners remember the economic and social activities of their sub-county.

2. Dance according to rhythm of known song
3. Draw and name shapes
4. Write the names of common colors

1.2 Physical features of our Sub-county / Division

Physical Features in Our Sub-county

Physical features are **natural things created by nature**. They are not made by people but are found in our environment.

Examples of Physical Features



- (i) **Hills** – raised land areas.
- (ii) **Valleys** – low land between hills or mountains.
- (iii) **Mountains** – very high land areas.
- (iv) **Lakes** – large water bodies surrounded by land.
- (v) **Rivers** – flowing water bodies.
- (vi) **Swamps** – wetland areas with water and plants.
- (vii) **Ponds** – small water bodies surrounded by land.

Questions

1. Name two physical features found in our sub-county.

Answer: Hills and rivers.

2. What is the difference between a valley and a hill?

Answer: A valley is low land between hills, while a hill is raised land.

3. Which physical feature provides fish for people?

Answer: Lakes provide fish for people.

4. Why are rivers important in our sub-county?

Answer: Rivers provide water for drinking, farming, and animals.

5. Mention one physical feature that is good for farming.

Answer: Plains or valleys are good for farming because they are flat and fertile.

6. How do swamps help people in our area?

Answer: Swamps provide water, reeds, and homes for birds.

7. What is a pond?

Answer: A pond is a small water body surrounded by land.

Teaching Tip: Encourage learners to **draw a simple sketch map** of their sub-county showing hills, rivers, lakes, and swamps. Let them label each feature and explain its importance.

Importance of Physical Features

Physical features like rivers, lakes, hills, valleys, swamps, and mountains are very important because they help people in many ways.

Examples of Importance

1. **Rivers and Lakes**

- Provide water for drinking and farming.
- Used for **fishing** to get food.
- Help in transport.

2. **Plains and Valleys**

- Good for **grazing animals**.
- Easy for farming crops.

3. **Forests and Hills**

- Provide wood, medicine, and fresh air.
- Tourist attractions.
- Fertile soils for farming.

4. **Swamps and Ponds**

- Source of reeds and papyrus.
- Home for birds and fish.
- Provide water for animals.

5. **Mountains**

- Tourist attractions.
- Provide fertile soils and fresh climate.

Questions

1. Why are rivers important to people?

Answer: Rivers are important because they provide water, fish, and transport.

2. Which physical feature is good for grazing animals?

Answer: Plains and valleys are good for grazing animals.

3. How do forests help people?

Answer: Forests help people by giving wood, medicine, and fresh air.

4. Mention one importance of mountains.

Answer: Mountains are important because they attract tourists.

5. What do swamps provide to people?

Answer: Swamps provide reeds, fish, and homes for birds.

Teaching Tip

Take learners outside or show them pictures of nearby rivers, plains, forests, and hills. Ask them to explain how each feature helps people (e.g., fishing, grazing, farming). This makes the lesson practical and memorable.

Mathematics Competences 1.2

Comparing sets

When we compare sets, we look at the **number of elements** in each set.

1. Equal Sets

Two sets are **equal** if they have the same elements. 📌 Example:

Set A = {2, 4, 6}

Set B = {2, 4, 6}

Here, $A = B$ (equal sets).

2. Equivalent Sets

Two sets are **equivalent** if they have the same **number of elements**, even if the elements are different. 📌 Example:

Set A = {a, b, c}

Set B = {1, 2, 3}

Both have 3 elements $\rightarrow A \approx B$ (equivalent sets).

3. Unequal Sets

Sets are **unequal** if they have different elements or different numbers of elements.

📌 Example:

Set A = {1, 2, 3}

Set B = {2, 4, 6, 8}

$A \neq B$ (unequal sets).

4. Subset

A set is a **subset** of another if all its elements are found in the other set. 📌 Example:

Set A = {2, 4}

Set B = {2, 4, 6, 8}

$A \subset B$ (A is a subset of B).

Exercise 1.2.1

1. If Set A = {1, 2, 3} and Set B = {3, 2, 1}, are they equal?

Answer: Yes, because they have the same elements.

2. If Set A = {a, b, c} and Set B = {x, y, z}, are they equivalent?

Answer: Yes, because both have 3 elements.

3. If Set A = {2, 4, 6} and Set B = {2, 4, 6, 8}, are they equal?

Answer: No, because Set B has an extra element.

4. Which set is a subset of the other: A = {2, 4}, B = {2, 4, 6}?

Answer: A is a subset of B.

5. If Set A = {cat, dog} and Set B = {cow, goat, sheep}, are they equivalent?

Answer: No, because Set A has 2 elements and Set B has 3.

Teaching Tip

Draw two circles on the board and place objects (stones, sticks, bottle tops) inside them. Let learners count and compare the sets by checking equality, equivalence, or subsets.

Counting in 10s

Meaning: Counting in 10s means adding **10 each time** starting from 0.

Numbers in 10s (from 0 to 990)

0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, ... continue until ... 980, 990.

👉 Notice: Each number ends with **0**.

Classroom Activity

- (i) Pupils clap **10 times** and say the next number (e.g., clap 10 times → say “10,” clap again → say “20”).
- (ii) Use **bottle tops or sticks**: group them in tens and count.

- (iii) Draw circles with **10 dots** inside each, then count by tens.

Exercise 1.2.2

1. Write the first five numbers when counting in 10s starting from 0.
2. What number comes after 70 when counting in 10s?
3. What number comes before 150 when counting in 10s?
4. Write the numbers between 200 and 250 when counting in 10s.
5. What is the last number when counting in 10s up to 990?



Suggested Answers

1. 0, 10, 20, 30, 40.
2. 80
3. 140
4. 210, 220, 230, 240.
5. 990

Teaching Tip: Encourage pupils to chant together: “*Ten, twenty, thirty, forty...*” This rhythm helps them memorize counting in 10s easily.

Counting in Twos

Meaning: Counting in 2s means adding **2 each time** as we move forward.

Numbers in 2s (from 0 to 100)

0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100.



Notice: Each number is **2 more** than the one before it.

Classroom Activity

- (i) Pupils clap their hands while counting in twos: “2, 4, 6, 8...”.

- (ii) Use bottle tops or sticks: group them in twos and count together.
- (iii) Learners can march around the classroom, taking steps in twos while chanting the numbers.

Exercise 1.2.3

1. What comes after 6 when counting in twos?
2. Continue the pattern: 10, 12, 14, __, __.
3. What comes before 20 when counting in twos?
4. Write the first ten numbers when counting in twos.
5. If we start at 100 and count backwards in twos, what comes next?

Suggested Answers

1. 8
2. 16, 18.
3. 18
4. 0, 2, 4, 6, 8, 10, 12, 14, 16, 18.
5. 98

Teaching Tip: Make a classroom chant or short poem: *“Two, four, six, eight, Counting in twos is really great!”*

Counting in Fives

Meaning: Counting in 5s means adding **5 each time** as we move forward.

Numbers in 5s (from 0 to 100)

0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100.

 Notice: Each number ends with **0 or 5**.

Classroom Activity

- (i) Learners clap **five times** then say the next number (e.g., clap 5 times → say “5,” clap again → say “10”).
- (ii) Use **bottle tops or sticks**: group them in fives and count together.
- (iii) Learners can march around the classroom, taking steps in fives while chanting the numbers.

Exercise 1.2.3

- 1. What comes after 25 when counting in fives?
- 2. Continue the pattern: 40, 45, 50, __, __.
- 3. What comes before 70 when counting in fives?
- 4. Write the first ten numbers when counting in fives.
- 5. If we start at 100 and count backwards in fives, what comes next?



Suggested Answers

- 1. 30
- 2. 55, 60.
- 3. 65
- 4. 0, 5, 10, 15, 20, 25, 30, 35, 40, 45.
- 5. 95

Teaching Tip: Make a chant: *“Five, ten, fifteen, twenty, Counting in fives is really plenty!”*

Place Value of Tens and Hundreds

Meaning:

- The **tens place** shows how many groups of ten are in a number.
- The **hundreds place** shows how many groups of one hundred are in a number.

Examples

1. Number: 45

- Tens = 4 → means 40
- Ones = 5 → means 5
- So, $45 = 40 + 5$.

2. Number: 326

- Hundreds = 3 → means 300
- Tens = 2 → means 20
- Ones = 6 → means 6
- So, $326 = 300 + 20 + 6$.

3. Number: 780

- Hundreds = 7 → means 700
- Tens = 8 → means 80
- Ones = 0 → means 0
- So, $780 = 700 + 80 + 0$.

Revision Questions

1. In the number 120, what is the value of the tens?
2. Break down the number 245 into hundreds, tens, and ones.
3. What is the value of the hundreds in 903?
4. In the number 67, what is the value of the tens?
5. Write 530 in expanded form (hundreds + tens + ones).



Suggested Answers

1. Tens = 2 → means 20.
2. $245 = 200 + 40 + 5$.
3. Hundreds = 9 → means 900.

4. Tens = 6 $\rightarrow$ means 60.

5. $530 = 500 + 30 + 0$.

Teaching Tip

Use **sticks, bottle tops, or counters**:

- Group them into bundles of ten for the **tens place**.
- Group them into bundles of one hundred for the **hundreds place**. This makes the concept very practical and easy to understand.

Place Value of Tens and Hundreds

Meaning:

- The **tens place** shows how many groups of ten are in a number.
- The **hundreds place** shows how many groups of one hundred are in a number.

Examples

(i) **Number: 45**

- Tens = 4 $\rightarrow$ means 40
- Ones = 5 $\rightarrow$ means 5
- So, $45 = 40 + 5$.

(ii) **Number: 326**

- Hundreds = 3 $\rightarrow$ means 300
- Tens = 2 $\rightarrow$ means 20
- Ones = 6 $\rightarrow$ means 6
- So, $326 = 300 + 20 + 6$.

(iii) **Number: 780**

- Hundreds = 7 $\rightarrow$ means 700

- Tens = 8 → means 80
- Ones = 0 → means 0
- So, $780 = 700 + 80 + 0$.

Exercise 1.2.4

1. In the number 120, what is the value of the tens?
2. Break down the number 245 into hundreds, tens, and ones.
3. What is the value of the hundreds in 903?
4. In the number 67, what is the value of the tens?
5. Write 530 in expanded form (hundreds + tens + ones).



Suggested Answers

1. Tens = 2 → means 20.
2. $245 = 200 + 40 + 5$.
3. Hundreds = 9 → means 900.
4. Tens = 6 → means 60.
5. $530 = 500 + 30 + 0$.

Teaching Tip

Use **sticks, bottle tops, or counters**:

- Group them into bundles of ten for the **tens place**.
- Group them into bundles of one hundred for the **hundreds place**. This makes the concept very practical and easy to understand.

Exercise 1.2.5

1. Write the numbers in expanded form

For example, $345 = 300 + 40 + 5$

- (i) 459
- (ii) 573
- (iii) 291
- (iv) 152
- (v) 169

2. Which number has been expanded

- (i) $600 + 70 + 2$
- (ii) $900 + 5$
- (iii) $70 + 6$
- (iv) $800 + 30$
- (v) $400 + 20 + 9$

Literacy Competences 1.2

Listening and speaking/signing

Exercise 1.2.6

1. Name physical features in your community.

Answers

Hills, Valleys, Lakes, Rivers, Swamps, Ponds, Mountains

2. Describe the physical features

Answers

- (i) **Hill** – Raised land smaller than a mountain, often covered with grass or trees. People farm or build homes on hills.
- (ii) **Valley** – Low land between hills or mountains, usually fertile and good for farming.
- (iii) **Lake** – A large body of still water surrounded by land, useful for fishing, transport, and providing water.
- (iv) **River** – Flowing water that moves across the land, important for farming, transport, and fishing.

- (v) **Swamp** – Wetland with water and plants like papyrus and reeds, home to birds and fish.
- (vi) **Pond** – A small body of still water, often used for fishing or watering animals.
- (vii) **Mountain** – Very high land with steep sides, sometimes with snow at the top, attracting tourists and providing fertile soils.

3. Discuss importance of physical features

Answers

- (i) **Hills and Mountains**
 - Provide fertile soils for farming.
 - Attract tourists.
 - Source of fresh air and cool climate.
- (ii) **Valleys and Plains**
 - Good for grazing animals.
 - Provide flat land for farming and settlement.
- (iii) **Lakes, Rivers, and Ponds**
 - Provide water for drinking, farming, and animals.
 - Used for fishing.
 - Help in transport.
- (iv) **Swamps**
 - Source of reeds and papyrus for making mats and baskets.
 - Home for birds and fish.
 - Provide water for animals.

Compass Points

A **compass** is an instrument used to show direction. It has four main points called **cardinal points**:

- **North (N)** – up direction.
- **East (E)** – where the sun rises.
- **South (S)** – down direction.
- **West (W)** – where the sun sets.

👉 Between these, we also have **intermediate points**:

- North-East (NE), North-West (NW), South-East (SE), South-West (SW).

How to Tell Direction

(i) Using the Sun

- Morning: The sun rises in the **East**.
- Evening: The sun sets in the **West**.
- If you face the sunrise (East), then:
 - Behind you = West
 - Right side = South
 - Left side = North

(ii) Using a Compass

- Point the compass needle to **North**.
- Other directions (E, S, W) are shown around it.

(iii) Importance of a Compass

A compass is very important because it helps people in many ways:

- **Shows Directions** – It helps us know North, East, South, and West.
- **Helps Travelers** – Guides people on land, water, and in the air so they do not get lost.
- **Used in Map Reading** – Helps us draw and read maps correctly by showing directions.
- **Supports Occupations** – Soldiers, sailors, pilots, and drivers use it to find their way.
- **Helps Pupils and Teachers** – In Social Studies, it helps learners understand positions of places.

Exercise 1.2.7

1. In which direction does the sun rise?

- Answer:** The sun rises in the East.
2. Which direction is opposite North?
Answer: South is opposite North.
3. If you face East, which direction is behind you?
Answer: West is behind you.
4. Name the four main compass points.
Answer: North, East, South, and West.
5. Which two directions form North-East?
Answer: North and East.

Exercise 1.2.7

Read the story and answer the questions that follow

Story: A Walk Around Our Community

One Saturday morning, Peter and his friends went for a walk in their community. As they walked, they saw many **physical features** and **landmarks**.

First, they climbed a **hill** covered with green grass. From the top, they saw the whole village. Down in the **valley**, cows were grazing peacefully.

Next, they reached a **river** flowing across the land. Fishermen were busy catching fish, and children were swimming near the riverbank. Beside the river was a **swamp** full of papyrus plants and birds.

After crossing the river, they saw a **church**, which is a landmark where people gather every Sunday to pray. Near the church stood the **market**, another landmark where people buy and sell food, clothes, and household items.

Peter realized that **physical features** like hills, valleys, rivers, and swamps are natural gifts, while **landmarks** like churches and markets are man-made places that help the community.

Questions

1. Name two physical features Peter and his friends saw.

Answer: Peter and his friends saw a hill and a river.

2. What were cows doing in the valley?

Answer: The cows were grazing peacefully in the valley.

3. Which physical feature was full of papyrus plants and birds?

Answer: The swamp was full of papyrus plants and birds.

4. Name two landmarks mentioned in the story.

Answer: The church and the market are landmarks mentioned in the story.

5. What is the difference between physical features and landmarks?

Answer: Physical features are natural things made by nature, while landmarks are man-made places built by people.

Teaching Tip

Ask learners to **draw a simple sketch** showing both physical features (hill, river, swamp) and landmarks (church, market) in their community. Then let them explain the difference in their own words.

English (non-medium) Competences 1.2

Exercise 1.2.8

Form sentences using the vocabulary: river, hill, valley, pond, mountain, fish, graze (v), well, spring, along, up the, down the, across from

Example sentences (pupils can read these sentences aloud)

1. The **river** flows through our village.
2. We climbed the **hill** to see the view.
3. The farmer's house is in the **valley**.
4. Ducks are swimming in the **pond**.
5. Mount Rwenzori is a tall **mountain**.
6. The fisherman caught a big **fish**.
7. Cows **graze** in the green field.
8. The family fetches water from the **well**.

9. A **spring** of clean water comes from the rock.
10. Children walked **along** the road to school.
11. The boy ran **up the** hill quickly.
12. The ball rolled **down the** slope.
13. The shop is **across from** the church.

Exercise 1.2.9

Form two questions each and answers using the following forms

1. Where is ... (hill, valley)?
The ... (hill, valley) is in the ... (East, West)

Example

Where is the hill?

The hill is in the East

2. Is the hill/valley/river) (along, across, up, down) the
spring/mountain/well)?
The ... is (along, across, up the, down the).....
It is (open, along, across) the ...
3. Where do we get ... (fish, water)?
We get ... (fish, water) from (rivers, lakes, ponds).

Exercise 1.2.10

Read the poem and answer the questions that follow

Poem: *Our Beautiful Land*

Hills rise high, green and tall,

Valleys stretch wide, feeding all.

Rivers flow with water clear,

Mountains stand strong, always near.

Swamps with reeds, birds in song,
Ponds where fish and frogs belong.
Our land is rich, both far and near,
Physical features we hold dear.

Questions

1. Which physical feature rises high and green?

Answer: Hills rise high and green.

2. What stretches wide and feeds all?

Answer: Valleys stretch wide and feed all.

3. Which physical feature flows with clear water?

Answer: Rivers flow with clear water.

4. Where do fish and frogs belong?

Answer: Fish and frogs belong in ponds.

5. Why are physical features important in the poem?

Answer: Because they make the land rich and beautiful.

Teaching Tip: Encourage pupils to **recite the poem aloud** with actions (e.g., stretching arms for valleys, flowing hands for rivers). This makes learning interactive and memorable.

Exercise 1.2.11

Spell the following words

- (i) River
- (ii) Lake
- (iii) Water
- (iv) Mountain

- (v) Hill
- (vi) Valley

Exercise 1.2.12

Write five sentences about the picture below



Creative Performing Arts 1.2

Exercise 1.2.13

1. Dance to rhythms of recorded songs.
2. Draw and label physical features
3. Dance to traditional music.
4. Model physical features

1.3 People in our Subcounty / Division

Tribes and Clans

A **tribe** is a large group of people who share the same language, culture, and ancestry.

A **clan** is a smaller family group within a tribe, usually led by elders or chiefs.

Tribes and clans give people identity, belonging, and cultural values.

Administrative Setup and Types of Leaders

(i) Political Leaders

Example: Local Council (LC) chairpersons, councillors.

They represent people, make decisions, and plan development.

(ii) Cultural Leaders

Example: Chiefs, clan heads, elders.

They preserve traditions, settle disputes, and guide morals.

Roles of Leaders

(i) **Settling disputes** → Leaders help solve conflicts peacefully.

(ii) **Guiding and counselling** → They advise people on family, cultural, and moral issues.

(iii) **Organizing meetings** → Leaders bring people together to discuss important matters.

(iv) **Planning for development** → They mobilize resources for schools, health centers, roads, and other projects.

Exercise 1.3.1

1. What is the difference between a tribe and a clan?

Answer: A tribe is a large group sharing language and culture, while a clan is a smaller family group within a tribe.

2. Name two types of leaders in a sub-county.

Answer: Political leaders (LC chairpersons) and cultural leaders (chiefs).

3. What role do leaders play when people quarrel?

Answer: Leaders settle disputes to maintain peace.

4. Why do leaders organize meetings?

Answer: To discuss important issues and make decisions for the community.

5. Mention one development project leaders can plan for.

Answer: Leaders can plan for schools, health centers, or roads.

Teaching Tip: Encourage pupils to **role-play** as LC chairpersons or clan elders. Let them act out how leaders settle disputes or plan for development. This makes the lesson lively and practical.

Mathematics Competences 1.3

Exercise 1.3.2

1. Draw a map of the school
2. Write numbers from
 - (i) 250 – 285
 - (ii) 151 – 171
 - (iii) 26 – 41
 - (iv) 674 – 695
 - (v) 981 - 999

Non-Standard Measures

Non-standard measures are everyday items used instead of standard units like meters, liters, or kilograms.

They help children understand measurement in a simple, practical way.

Examples

1. **Length/Width:** Use **hand spans**, **footsteps**, or **sticks**.

Example: The desk is **5 hand spans** long.

2. **Capacity:** Use **cups**, **bottles**, or **jugs**.

Example: The pot holds **3 bottles of water**.

3. **Weight:** Use **stones**, **bags**, or **handfuls**.

Example: The pumpkin is as heavy as **2 stones**.

4. **Quantity:** Use **tins**, **spoons**, or **handfuls**.

Example: Add **2 handfuls of beans** to the saucepan.

Classroom Activities

- a) Pupils measure the classroom using footsteps.
- b) Compare the length of books using hand spans.
- c) Bring cups, tins, and bottles from home to measure water or flour.
- d) Role-play: One group acts as cooks measuring with spoons, another as builders measuring with sticks.

Exercise 1.3.3

1. **What are non-standard measures?**

Answer: Non-standard measures are everyday items like cups, tins, or hand spans used instead of standard units.

2. **Give one example of measuring length using non-standard units.**

Answer: Length can be measured using hand spans.

3. **Which non-standard unit can be used to measure capacity?**

Answer: Capacity can be measured using cups or bottles.

4. **How can beans be measured using non-standard units?**

Answer: Beans can be measured using tins or handfuls.

5. **Why do we use non-standard measures in lower classes?**

Answer: Because they are simple, familiar, and easy for children to understand.

Teaching Tip: Always make this lesson practical—let pupils measure real objects in class using their hands, feet, cups, or tins.

Literacy Competences 1.3

Exercise 1.3.4

1. Write names of ten pupils in your class.
2. Write ten names of people in your family
3. Write three roles of leaders in your subcounty.

Exercise 1.3.5

Read the dialogue and answer the questions that follow:

Dialogue: *Administrative Set-up in Our Sub-county*

Teacher: Good morning, class. Today we are learning about the administrative set-up in our sub-county. Who knows what “administrative set-up” means?

Bbosa: It means how leaders and offices are organized to manage the sub-county.

Teacher: Correct! At the top, we have the **Sub-county Chief**. What does the Chief do?

Mark: The Chief supervises all workers and ensures government programs are followed.

Teacher: Very good. Below the Chief, we have the **Local Council (LC) leaders**. Who can name one?

Sarah: The LC III Chairperson.

Teacher: Excellent! The LC III Chairperson works with councillors to make decisions. What about the **Parish Chiefs**?

Mary: Parish Chiefs help to manage smaller areas called parishes.

Teacher: And at the village level, we have **LC I leaders**. What is their role?

Moses: They keep peace in the village and report problems to higher leaders.

Teacher: Well done! So, the administrative set-up starts from the village, then parish, then sub-county. Each level has leaders who help manage the community.

Questions

1. **What is meant by administrative set-up?**
2. **Answer:** Administrative set-up means how leaders and offices are organized to manage the sub-county.
3. **Who is at the top of the sub-county administration?**
Answer: The Sub-county Chief is at the top of the sub-county administration.
4. **What is the role of the LC III Chairperson?**
Answer: The LC III Chairperson works with councilors to make decisions for the sub-county.
5. **Who manages smaller areas called parishes?**
Answer: Parish Chiefs manage smaller areas called parishes.
6. **What do LC I leaders do at the village level?**
Answer: LC I leaders keep peace in the village and report problems to higher leaders.

Exercise 1.3.6

Rearrange the sentences to form a story

1. That is how tribes began and why they remain important in communities today.
2. Long ago, people lived together as one big family.
3. Several clans joined together to form bigger groups known as tribes.
4. As the family grew larger, they divided into smaller groups called clans.
5. Each tribe shared a common language, culture, and traditions.

The story

Long ago, people lived together as one big family. As the family grew larger, they divided into smaller groups called clans. Several clans joined together to form bigger groups known as tribes. Each tribe shared a common language, culture, and traditions. That is how tribes began and why they remain important in communities today.

Punctuation Marks

Punctuation marks are symbols we use in writing to make meaning clear.

Common Punctuation Marks

1. **Full Stop (.)** – Used at the end of a sentence.
Example: The boy is running.
2. **Comma (,)** – Separates items in a list or short pauses.
Example: I bought apples, bananas, and oranges.
3. **Question Mark (?)** – Used at the end of a direct question.
Example: Where are you going?
4. **Exclamation Mark (!)** – Shows strong feelings or excitement.
Example: What a beautiful day!
5. **Quotation Marks (" ")** – Show direct speech or quotations.
Example: Mary said, "I am happy."
6. **Apostrophe (')** – Shows possession or contractions.
Example: This is John's book. / It's raining.
7. **Colon (:)** – Introduces a list or explanation.
Example: Bring the following: pens, books, and rulers.
8. **Semicolon (;)** – Connects closely related sentences.
Example: I have a test tomorrow; I must study tonight.

Exercise 1.3.7

1. Which punctuation mark ends a statement?
2. Write a sentence with a comma separating three items.
3. Which punctuation mark shows strong feelings?
4. How are quotation marks used?
5. Give an example of an apostrophe showing possession.

Full-Sentence Answers

1. A full stop is used at the end of a statement.
2. A comma separates items in a list, e.g., *I bought apples, bananas, and oranges.*
3. An exclamation mark shows strong feelings, e.g., *What a beautiful day!*
4. Quotation marks are used to show direct speech, e.g., *She said, "I am happy."*
5. An apostrophe shows possession, e.g., *This is John's book.*

Teaching Tip: Give learners short sentences without punctuation and let them insert the correct marks. Example: *Mary said I am happy* → Learners add quotation marks: *Mary said, "I am happy."*

English (non-medium) Competences

Exercise 1.3.8

1. Write a sentence for each of the following vocabulary: chairperson, secretary, office, parish, leader, children, parent(s), teacher, police, army, teach, preach, friend, member.

Example sentences – for pupils to read aloud

- a) **Chairperson** – The **chairperson** led the meeting.
- b) **Secretary** – The **secretary** wrote the minutes.
- c) **Office** – The teacher works in the **office**.
- d) **Parish** – Our **parish** has many churches.
- e) **Leader** – A good **leader** guides the people.
- f) **Children** – **Children** play happily in the field.
- g) **Parents** – **Parents** care for their children.
- h) **Teacher** – The **teacher** teaches us every day.

- i) **Police** – The **police** keep peace in the community.
 - j) **Army** – The **army** protects the country.
 - k) **Teach** – Teachers **teach** pupils new lessons.
 - l) **Preach** – The pastor will **preach** on Sunday.
 - m) **Friend** – My **friend** helps me with homework.
 - n) **Member** – Every **member** attends the meeting.
2. Form two questions and answers using each of the following structures
- 1. What does a ... (policeman/ teacher) do?
A ... (policeman, teacher) ... (teaches, keeps law and order).
He/she ... (keeps law and order/ teaches).
Example
What does a policeman do?
A policeman keeps law and order.
He keeps law and order
 - 2. • Where is the ... (chairperson, policeman)?
The ... (policeman, chairperson) is in the ... (office, road).
He/she ... (is) in the ... (office/valley).
 - 3. What do you do every day?
I ... (teach, preach) every day.

Exercise 1.3.9

Read the dialogue and answer the questions that follow

Dialogue: *People in Our Sub-county*

Teacher: Good morning, class. Today we are learning about people in our sub-county. Who can name some of them?

Bbosa: We have farmers who grow crops.

Teacher: Very good. Who else?

Ester: Traders sell goods in the market.

Teacher: Excellent! What about those who help us learn?

Joan: Teachers teach children in schools.

Teacher: Correct. And who keeps peace in the community?

Mark: The police and leaders guide us.

Teacher: Wonderful. So, people in our sub-county do different jobs to help the community.

Questions and Answers

1. Name two types of people found in a sub-county.

Answer: *Farmers and traders.*

2. What do farmers do in the sub-county?

Answer: *Farmers grow crops.*

3. Who teaches children in schools?

Answer: *Teachers teach children in schools.*

4. Who sells goods in the market?

Answer: *Traders sell goods in the market.*

5. Why are police important in the sub-county?

Answer: *Police keep peace in the community.*

Teaching Tip: Let learners role-play this dialogue in groups. One group can act as farmers, another as traders, another as teachers, and another as police. This makes the lesson lively and memorable.

Creative Performing Arts 1.3

1. Draw and color physical features
2. Model physical features with clay, papier mache or plasticine
3. Sing the first stanza/verse of the National Anthem correctly

Oh Uganda! may God uphold thee,
We lay our future in thy hand.
United, free,
For liberty
Together we'll always stand.

Oh Uganda! the land of freedom.
Our love and labour we give,
And with neighbours all
At our country's call
In peace and friendship we'll live.

Oh Uganda! the land that feeds us
By sun and fertile soil grown.
For our own dear land,
We'll always stand,
The Pearl of Africa's Crown.

THEME 2: LIVELIHOOD IN OUR SUB-COUNTY / DIVISION

Expected learning outcome: The child applies acquired skills and appreciates the benefits of participating in different activities.

Money-Generating Occupations

These are jobs that bring income to families and help the community grow.

- (i) **Trading** – Selling goods in shops and markets.
- (ii) **Tailoring** – Making clothes for people.
- (iii) **Fishing** – getting fish from water
- (iv) **Entertainment** – Musicians, dancers, and actors earn money while preserving culture.
- (v) **Pottery / Brick Making** – Producing pots and bricks for homes and buildings.
- (vi) **Carpentry** – Making furniture such as chairs, tables, and doors.
- (vii) **Weaving / Knitting** – Producing baskets, mats, ropes, and sweaters.

Subsistence Activities (Common in the Community)

These are activities done mainly to support families, sometimes with little income.

- (i) **Casual Laboring** – Helping on farms or construction sites for small pay.
- (ii) **Farming / Animal Rearing** – Growing crops like maize, beans, bananas, and keeping goats, cows, or chickens.
- (iii) **Cookery** – Preparing food for families or selling meals in small restaurants.

Importance of Different Activities

People in our sub-county do many activities. Each activity is important because it helps the community in different ways:

1. **Farming (crop growing and animal rearing)**
 - Provides food for families.
 - Earns money when crops and animals are sold.
 - Supplies raw materials for industries.
2. **Trading (shops, markets, selling goods)**
 - Helps people get the things they need.
 - Creates jobs and income.
 - Promotes development in the sub-county.
3. **Teaching**
 - Educates children and adults.
 - Builds knowledge and skills for future work.
 - Promotes discipline and good behavior.
4. **Fishing**
 - Provides food (fish).
 - Creates income for fishermen.
 - Supplies fish to markets and towns.
5. **Carpentry, Tailoring, Craft Making**
 - Provide furniture, clothes, and handmade goods.
 - Create jobs and income.
 - Preserve culture through crafts.
6. **Entertainment (music, drama, sports)**
 - Brings joy and unity.
 - Provides income for performers.
 - Promotes culture and talent.

Mathematics Competences 2.1

Grouping in 10s

Meaning: Grouping in 10s means putting objects together in sets of **10** to make counting easier.

Example with Bottle Tops

- Put **10 bottle tops** in one group.
- Another **10 bottle tops** in the next group.
- Continue grouping until all are arranged.



Instead of counting one by one, pupils count: **10, 20, 30, 40...**

Classroom Activities

- (i) Give pupils sticks, stones, or bottle tops. Ask them to group them into 10s.
- (ii) Draw circles on the board and place **10 dots** in each circle.
- (iii) Pupils clap **10 times** for each group and say the number aloud.

Exercise 2.1.1

1. How many groups of 10 can you make from 50 bottle tops?
2. If you have 70 stones, how many groups of 10 can you form?
3. Write the numbers you get when grouping 100 sticks in 10s.
4. What number comes after 40 when grouping in 10s?
5. What number comes before 90 when grouping in 10s?



Suggested Answers

1. 5 groups.
2. 7 groups.
3. 10, 20, 30, 40, 50, 60, 70, 80, 90, 100.
4. 50

Counting in 10s from 1000 to 2000

Meaning: Adding **10 each time** starting from 1000.

Numbers in 10s

1000, 1010, 1020, 1030, 1040, 1050, ... continue until ... 1990, 2000.

👉 Notice: Each number ends with **0**.

Classroom Activities

- (i) Pupils clap **10 times** and say the next number in 10s.
- (ii) Use **sticks or bottle tops** grouped in 10s to visualize counting.
- (iii) Draw circles with **10 dots** inside each and count together.
- (iv) Chant aloud: *“One thousand, one thousand ten, one thousand twenty...”*

Exercise 2.1.2

- 1. Write the first five numbers when counting in 10s from 1000.
Answer: 1000, 1010, 1020, 1030, 1040.
- 2. What number comes after 1250 when counting in 10s?
Answer: 1260.
- 3. What number comes before 1700 when counting in 10s?
Answer: 1690.
- 4. Write the numbers between 1500 and 1550 when counting in 10s.
Answer: 1510, 1520, 1530, 1540.
- 5. What is the last number when counting in 10s up to 2000?
Answer: 2000.

Teaching Tip: Encourage pupils to chant together in rhythm. This helps them memorize counting in 10s easily.

Counting in 100s from 1000 to 2000

Meaning: Adding **100 each time** starting from 1000.

Numbers in 100s

1000, 1100, 1200, 1300, 1400, 1500, ... continue until ... 1900, 2000.

👉 Notice: Each number ends with **00**.

Classroom Activities

1. Pupils clap **100 times** (or count bundles of sticks in 100s) and say the next number.
2. Use **bottle tops grouped in 100s** to visualize counting.
3. Draw circles with **100 dots** inside each and count together.
4. Chant aloud: *“One thousand, eleven hundred, twelve hundred...”*

Exercise 2.1.3

1. **Write the first five numbers when counting in 100s from 1000.**
Answer: 1000, 1100, 1200, 1300, 1400.
2. What number comes after 1500 when counting in 100s?
Answer: 1600.
3. What number comes before 1900 when counting in 100s?
Answer: 1800.
4. Write the numbers between 1200 and 1500 when counting in 100s.
Answer: 1300, 1400.
5. What is the last number when counting in 100s up to 2000?
Answer: 2000.

Teaching Tip: Encourage pupils to chant together in rhythm. This helps them memorize counting in 100s easily.

Adding Horizontally

Meaning: Writing numbers side by side (in a row) and adding them directly.

Examples

1. Adding Units (Ones)

$$3 + 5 = 8$$

$$7 + 2 = 9$$

2. Adding Tens

$$20 + 30 = 50$$

$$40 + 30 = 80$$

3. Adding Hundreds

$$200 + 300 = 500$$

$$400 + 100 = 500$$

 Notice:

- Units add up to give ones.
- Tens add up to give tens.
- Hundreds add up to give hundreds.

Classroom Activities

- Pupils write sums on the board horizontally and solve them.
- Use **sticks or counters** grouped in 1s, 10s, and 100s to demonstrate.
- Chant: *“Units, tens, hundreds — add them side by side!”*

Exercise 2.1.4

Add (answers in square brackets)

1. $4 + 4 =$ [8]

2. $6 + 3 =$ [9]

3. $7 + 3 =$ [10]
4. $3 + 3 =$ [5]
5. $1 + 6 =$ [7]
6. $30 + 60 =$ [90]
7. $20 + 30 =$ [50]
8. $30 + 40 =$ [40]
9. $80 + 10 =$ [90]
10. $60 + 20 =$ [80]
11. $200 + 300 =$ [500]
12. $700 + 100 =$ [800]
13. $300 + 500 =$ [800]
14. $500 + 200 =$ [700]
15. $200 + 700 =$ [900]

Measuring Ingredients with Non-Standard Units

Non-standard units are everyday items used instead of standard measures like grams or liters.

In cookery, children can use cups, spoons, tins, bottles, jugs, or handfuls to measure ingredients.

Examples

- (i) Sugar can be measured using **spoons**.

Example: Add **3 spoons of sugar** to tea.

- (ii) Flour can be measured using **cups**.

Example: Use **2 cups of flour** to bake chapati.

- (iii) Water can be measured using **bottles** or **jugs**.

Example: Pour **1 jug of water** into the saucepan.

- (iv) Beans can be measured using **tins**.

Example: Cook **2 tins of beans** for lunch.

- (v) Salt can be measured using **handfuls**.

Example: Add **1 handful of salt** to the soup.

Classroom Activities

- Pupils bring cups, spoons, tins, and bottles from home.
- Practice measuring rice, beans, or flour using these items.
- Role-play: One group acts as cooks measuring with cups, another as helpers using spoons.
- Chant: *Cups and spoons, tins and jugs, Measure food for all of us!*

Exercise 2.1.5

1. What are non-standard units in cookery?
Answer: Non-standard units in cookery are everyday items like cups, spoons, tins, and bottles used to measure ingredients.
2. How can sugar be measured in cookery?
Answer: Sugar can be measured using spoons.
3. Which non-standard unit can be used to measure flour?
Answer: Flour can be measured using cups.
4. Give one example of measuring beans using non-standard units.
Answer: Beans can be measured using tins, for example, 2 tins of beans.
5. Why do we use non-standard units in Primary One cookery lessons?
Answer: We use non-standard units because they are simple, familiar, and easy for children to understand.

Teaching Tip: Always make this lesson practical—bring real cups, spoons, tins, and bottles to class so pupils can measure ingredients themselves.

Literacy Competences 2.1

Exercise 2.1.5

1. Identify economic activities in our community.
2. State one importance of each economic activities in our community.
3. Miming or role-playing people's occupations
4. Talk about what people can do to get money

Future Needs in Our Community

Explanation

In the future, people in our community will need many things to live better lives. These include:

- (i) **More schools** so that all children can learn.
- (ii) **Hospitals** to treat the sick.
- (iii) **Better roads** for easy transport.
- (iv) **Clean water** for drinking and cooking.
- (v) **Electricity and technology** to help with work and communication.
- (vi) **Markets and jobs** to earn money and buy goods.

Example Sentences

- (i) In the future, our community will need more schools.
- (ii) People will want hospitals to care for the sick.
- (iii) We shall need clean water for drinking.
- (iv) Roads will be needed for easy transport.
- (v) Electricity will help us use machines and lights.

Exercise 2.1.6

1. What will children need in the future?

Answer: Children will need more schools to learn.

2. Why will hospitals be important?

Answer: Hospitals will be important to treat the sick.

3. What will help people travel easily?

Answer: Better roads will help people travel easily.

4. What will people need for cooking and drinking?

Answer: People will need clean water for cooking and drinking.

5. Why will electricity be needed?

Answer: Electricity will be needed to use machines and lights.

Teaching Tip: After the lesson, ask pupils to **draw pictures** of what they think their community will look like in the future (e.g., schools, hospitals, water taps, roads). This makes the learning creative and memorable.

Exercise 2.1.7

Read the poem and answer the questions that follow

Poem: *Tomorrow in Our Community*

Tomorrow we shall build new schools,
Children will learn with brighter tools.

Hospitals will care for all,
Doctors ready when sickness calls.

Farmers will grow food every day,
Markets will sell in a busy way.

Roads will stretch both far and near,
Cars and bicycles moving clear.

Clean water will flow from taps,
Helping families bridge all gaps.

Together we'll work, hand in hand,
To make our future strong and grand.

Questions

1. **What will children use in future schools?**

Answer: Children will use brighter tools in future schools.

2. **Who will be ready when sickness calls?**

Answer: Doctors will be ready when sickness calls.

3. **What will farmers do every day?**

Answer: Farmers will grow food every day.

4. **Where will people sell goods?**

Answer: People will sell goods in the market.

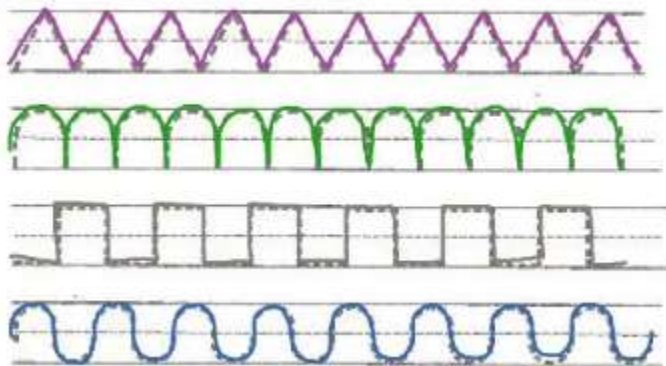
5. **What will flow from taps in the future?**

Answer: Clean water will flow from taps in the future.

Teaching Tip: After reading the poem, ask pupils to **act out the activities** (pretend farming, teaching, building, fetching water) to make the lesson lively and memorable.

Exercise 2.1.8

Practice the following writing patterns



English (non-medium) Competences 2.1

Exercise 2.1.9

Write a sentence for each of the following vocabulary: bricks, fish, dance, drum, weave, cook, carpenter, sew, play, secretary, teacher, butcher.

Example sentences: let students read these sentences loudly.

Sentences

- (i) **Bricks** – The mason built a house with **bricks**.
- (ii) **Fish** – The fisherman caught a big **fish**.
- (iii) **Dance** – Children dance happily at the **party**.
- (iv) **Drum** – The boy beat the drum **loudly**.
- (v) **Weave** – Mother can **weave** a mat from palm leaves.
- (vi) **Cook** – We **cook** food in the kitchen.
- (vii) **Carpenter** – The **carpenter** made a wooden chair.
- (viii) **Sew** – The tailor will **sew** a new dress.
- (ix) **Play** – The children **play** football in the field.
- (x) **Secretary** – The **secretary** wrote the minutes of the meeting.
- (xi) **Teacher** – The teacher **teaches** pupils every morning.
- (xii) **Butcher** – The **butcher** sells meat in the market.

Exercise 2.1.10

Form questions and answers using the following structures

1. Who can ... (weave)?
I/you can ... (weave ...) but (I/you) cannot ... (sew a dress).
- We/they can ... (weave) ... but cannot ... (sew) a dress.
Example
Who can weave?
We can wave but cannot sew a dress
2. Who makes ... (chairs)?
The/a ... (carpenter) makes ... (chairs).
3. Who sells ... (fish)?
The/A ... (fishmonger) sells ... (fish).

Conversation chain

Conversation chain means each pupil adds a sentence to keep the talk flowing, building on what the previous speaker said.

Example of Conversation Chain

Pupil A: In the future, our community will build new schools.

Pupil B: Yes, and children will learn with better books.

Pupil C: Teachers will help pupils to study hard.

Pupil D: Hospitals will treat sick people in our community.

Pupil E: Farmers will grow more food for everyone.

Pupil F: Traders will sell goods in the market.

Pupil G: Roads will be built to connect villages.

Pupil H: Clean water will flow from taps in every home.

Exercise 2.1.11

Start a conversation chain and let each pupil on different topics, for example going to school

Sentence one: I woke up at 7.00 am

Exercise 2.1.12

Read the story and answer the questions that follow:

Story: *Work in Our Community*

In our community, people do different kinds of work. The farmer wakes up early to dig and plant crops. The teacher goes to school to teach children how to read and write. The carpenter makes tables and chairs from wood. The tailor sews clothes for families. The doctor treats sick people in the hospital. The trader sells goods in the market. Each person's work is important because it helps the community to grow and live well.

Questions

1. Who wakes up early to dig and plant crops?

Answer: The farmer wakes up early to dig and plant crops.

2. What does the teacher do at school?

Answer: The teacher teaches children how to read and write.

3. Who makes tables and chairs from wood?

Answer: The carpenter makes tables and chairs from wood.

4. What does the tailor do for families?

Answer: The tailor sews clothes for families.

5. Why is each person's work important?

Answer: Each person's work is important because it helps the community to grow and live well.

Teaching Tip: After reading the story, ask pupils to **role-play** different jobs (farmer, teacher, doctor, trader) to make the lesson lively and memorable.

Creative Performing Arts 2.1

1. Drawing and labelling pictures of daily activities
2. Weaving, e.g. baskets, bags mat, belts, covers
3. Making and decorating grass brooms
4. Sing the following work song

Song: *People at Work*

(Tune suggestion: "If You're Happy and You Know It")

Verse 1

Farmers dig and plant the seeds, clap your hands.
Farmers dig and plant the seeds, clap your hands.
They grow food for us all,
Healthy children, big and small,
Farmers dig and plant the seeds, clap your hands.

Verse 2

Teachers teach us every day, read your books.
Teachers teach us every day, read your books.
They help us learn and grow,
Knowledge makes our minds to glow,
Teachers teach us every day, read your books.

Verse 3

Carpenters build with wood and nails, hammer strong.
Carpenters build with wood and nails, hammer strong.
Tables, chairs, and doors they make,
Homes are strong for all to take,
Carpenters build with wood and nails, hammer strong.

Verse 4

Fishermen catch fish to eat, throw the net.
Fishermen catch fish to eat, throw the net.
By the lake they work each day,
Bringing food in every way,
Fishermen catch fish to eat, throw the net.

Questions

1. Who grows food for us?
Answer: Farmers grow food for us.
2. What do teachers do?
Answer: Teachers teach us every day.
3. Who builds tables and chairs?
Answer: Carpenters build tables and chairs.
4. Where do fishermen work?
Answer: Fishermen work by the lake.
5. Why is people's work important?
Answer: People's work helps the community.

Reading and writing solfa notes of the major scale d r •

The Major Scale in Sol-fa

1. Sol-fa Names

Do – Re – Mi – Fa – So – La – Ti – Do

2. Reading the Notes

Start at **Do** and move step by step up the scale.

Example: *Do, Re, Mi, Fa, So, La, Ti, Do.*

Read them aloud while pointing to the notes on the board.

3. Writing the Notes

Write the sol-fa symbols (d, r, m, f, s, l, t, d') on the stave.

Example in **C major**:

- d = C
- r = D
- m = E

- f = F
- s = G
- l = A
- t = B
- d¹ = C (higher Do)

Practice Sentences

1. The first note of the scale is **Do**.
2. The second note is **Re**.
3. The third note is **Mi**.
4. The scale has **eight notes**.
5. In C major, **Do is C**.

Exercise 2.1.13

1. How many notes are in the major scale?

Answer: There are eight notes in the major scale.

2. Which note comes after Re?

Answer: Mi comes after Re.

3. What is the first note of the major scale?

Answer: The first note of the major scale is Do.

4. In C major, which letter name is Do? **A:**

Answer: In C major, Do is C.

5. Why is the major scale important?

Answer: The major scale is important because it helps us read, write, and sing melodies.

Teaching Tip: Pupils can clap or step as they sing *Do-Re-Mi-Fa-So-La-Ti-Do*. This combines reading, writing, and singing for better memory.

2.2 Social services and their importance

Social Services in the Community

(i) **Education**

Schools, teachers, and libraries.

Importance: Makes citizens literate and knowledgeable.

(ii) **Health**

Hospitals, clinics, and health centers.

Importance: Keeps people healthy and strong.

(iii) **Communication**

Radios, phones, newspapers, and post offices.

Importance: Helps information flow quickly.

(iv) **Transport**

Roads, bridges, bicycles, buses, and taxis.

Importance: Makes movement of people and goods easy.

(v) **Water Supply**

Wells, boreholes, taps, and springs.

Importance: Provides clean water for drinking, cooking, and washing.

(vi) **Security**

Police, army, and local leaders.

Importance: Protects people and property, helps us live peacefully.

Importance of Social Services

(i) **Education** → Literate citizens.

(ii) **Health** → Good health.

(iii) **Communication** → Information flow.

- (iv) **Transport** → Easy movement.
- (v) **Water Supply** → Safe water for life.
- (vi) **Security** → Protection and peaceful living.

Exercise 2.2.1

1. Why is education important in our sub-county? **A:** Education is important because it makes citizens literate.
2. What is the importance of health services?
Health services are important because they give people good health.
3. How do communication services help people?
Communication services help people by allowing information to flow quickly.
4. Why do we need transport services?
We need transport services because they make movement of people and goods easy.
5. Who protects people and property in the community?
The police and army protect people and property in the community.

Teaching Tip: Pupils can draw six boxes in their exercise books, each with a picture (school, hospital, phone, road, tap, police station) and write its importance below. This makes the lesson visual and memorable.

Mathematics Competences 2.2

Exercise 2.2.1

1. Read the following numbers
 - (i) 1010
 - (ii) 1050
 - (iii) 1610
 - (iv) 1980
 - (v) 1720
 - (vi) 1630

2. Read the following numbers 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000

3. Write numbers in 10s from

(i) 1040 – 1150

(ii) 1320 – 1460

(iii) 1510 – 1610

(iv) 1700 – 1810

(v) 1900 - 1800

4. Write numbers in 100s from

(i) 1200 – 1600

(ii) 800 – 1400

(iii) 1300 - 2000

5. Add

$$\begin{array}{r} 1. \quad 123 \\ + 321 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 163 \\ + 122 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 123 \\ + 523 \\ \hline \end{array}$$

$$\begin{array}{r} 16. \quad 223 \\ + 376 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 456 \\ + 321 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 513 \\ + 324 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 723 \\ + 225 \\ \hline \end{array}$$

$$\begin{array}{r} 17. \quad 653 \\ + 124 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 323 \\ + 324 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 623 \\ + 351 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 177 \\ + 321 \\ \hline \end{array}$$

$$\begin{array}{r} 18. \quad 823 \\ + 141 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 523 \\ + 334 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 173 \\ + 821 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 153 \\ + 624 \\ \hline \end{array}$$

$$\begin{array}{r} 19. \quad 423 \\ + 363 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 623 \\ + 342 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 323 \\ + 326 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 723 \\ + 265 \\ \hline \end{array}$$

$$\begin{array}{r} 20. \quad 426 \\ + 351 \\ \hline \end{array}$$

Objects Used in Communication

Communication objects are things we use to pass information. They can be grouped into categories:

1. Traditional Objects

Examples: Drums, horns, smoke signals, bells.

Use: Sending messages in villages, calling meetings, or warning people.

2. Written Objects

Examples: Books, letters, newspapers, chalkboards.

Use: Recording and sharing information through writing.

3. Electronic Objects

Examples: Radios, televisions, telephones, computers, mobile phones.

Use: Sending messages quickly over long distances using electricity.

4. Visual Objects

Examples: Pictures, charts, maps, posters, drawings.

Use: Passing information through images and symbols.

5. Human Objects

Examples: Mouth, hands, eyes, gestures, facial expressions.

Use: People use their bodies to communicate directly.

Exercise 2.2.2

1. Name one traditional object used in communication.

Answer: A drum is a traditional object used in communication.

2. Which communication object is used to record information in writing?

Answer: A book is used to record information in writing.

3. Give one example of an electronic communication object.

Answer: A mobile phone is an example of an electronic communication object.

4. How do visual communication objects pass information?

Answer: Visual communication objects pass information through images and symbols.

5. Which part of the human body is used to speak during communication?

Answer: The mouth is used to speak during communication.

Teaching Tip: Draw a chart with five boxes labeled *Traditional, Written, Electronic, Visual, Human*. Pupils can place or draw objects in the correct box. This makes classification easy and fun.

Literacy Competences 2.2

Exercise 2.2.2

1. Describe the different social services provided

Answer

(a) **Education**

It is provided through schools, teachers, and libraries.

It helps children and adults to read, write, and gain knowledge.

(b) **Health**

It is provided through hospitals, clinics, and health centers.

It helps people to stay healthy and receive treatment when sick.

(c) **Communication**

It is provided through radios, phones, newspapers, and post offices.

It helps people to share and receive information quickly.

(d) **Transport**

It is provided through roads, bridges, bicycles, buses, and taxis.

It helps people and goods to move easily from one place to another.

(e) **Water Supply**

It is provided through wells, boreholes, taps, and springs.

It gives clean water for drinking, cooking, and washing.

(f) **Security**

It is Provided through police, army, and local leaders.

It protects people and property, and helps us live peacefully.

2. Read the story and answer the questions that follow

Story: *The Talking Objects*

One morning in the village, the drum was beaten to call people for a meeting. Later, the teacher wrote a message on the chalkboard for pupils to read. At home, Sarah's father listened to the radio to hear news from the town. Her mother used the mobile phone to talk to her friend far away. In the evening, Sarah drew a picture to show her family what she had learned in school.

Questions

(a) Which traditional object was used to call people for a meeting?

Answer: The drum was used to call people for a meeting.

(b) What did the teacher use to pass a message to pupils?

Answer: The teacher used the chalkboard to pass a message to pupils.

(c) Which communication object did Sarah's father use at home?

Answer: Sarah's father used the radio at home.

(d) How did Sarah's mother talk to her friend far away?

Answer: Sarah's mother used a mobile phone to talk to her friend far away.

(e) What did Sarah draw in the evening?

Answer: Sarah drew a picture to show her family what she had learned in school.

3. Read the dialogue and answer the questions that follow

Dialogue: *Social Services in Our Community*

Teacher: Good morning, children. Today we shall talk about social services. Can anyone tell me one social service?

Bbosa: Education is a social service.

Teacher: Very good. Why is education important?

Bbosa: Education is important because it makes citizens literate.

Teacher: Who can give me another social service?

Sarah: Health services.

Teacher: Correct. What is their importance?

Sarah: Health services are important because they give people good health.

Teacher: Yes. What about communication services?

Mark: Communication services help people to share information quickly.

Teacher: Excellent. And transport services?

Joan: Transport services help people to move easily from one place to another.

Teacher: Good answers. What about water supply?

moses: Water supply gives us clean water for drinking, cooking, and washing.

Teacher: Finally, who can tell me about security services?

Ali: Security services protect people and property so we can live peacefully.

Teacher: Well done, class. All these services are very important in our sub-county.

Questions

(a) Why is education important?

Answer: Education is important because it makes citizens literate.

(b) What is the importance of health services?

Answer: Health services are important because they give people good health.

(c) How do communication services help people?

Answer: Communication services help people by allowing information to flow quickly.

(d) Why do we need transport services?

Answer: We need transport services because they make movement easy.

(e) Who provides security in the community?

Answer: The police and army provide security in the community.

Teaching Tip: Pupils can role-play this dialogue in pairs or groups, each taking turns as “Teacher” and “Pupil.” This makes the lesson interactive and helps them remember the importance of each service.

4. Fill-in Exercise

- (a) _____ helps children and adults to read and write.
- (b) _____ services give people good health.
- (c) _____ helps people to share information quickly.
- (d) _____ services make movement of people and goods easy.
- (e) _____ provides clean water for drinking and cooking.
- (f) _____ services protect people and property.

Answers

- (a) **Education** helps children and adults to read and write.
- (b) **Health** services give people good health.
- (c) **Communication** helps people to share information quickly.
- (d) **Transport** services make movement of people and goods easy.
- (e) **Water supply** provides clean water for drinking and cooking.
- (f) **Security** services protect people and property.

English (non-medium) Competences 2.2

Exercise 2.2.3

1. Write one sentence for each of the following vocabulary: aeroplane, train, water, lorry, taxi, telephone, television, hospital, clinic, police, treat

Example sentences: let the pupils read the sentences correctly and loudly

- (a) **Aeroplane** – The **aeroplane** flies high in the sky.
- (b) **Train** – The **train** carries passengers from one town to another.
- (c) **Water** – We drink clean **water** to stay healthy.
- (d) **Lorry** – The **lorry** transports goods to the market.
- (e) **Taxi** – My father took a **taxi** to work this morning.
- (f) **Telephone** – The teacher used a **telephone** to call the head teacher.
- (g) **Television** – We watch news and songs on **television**.
- (h) **Hospital** – Sick people go to the **hospital** for treatment.
- (i) **Clinic** – The nurse works at the **clinic** near our school.
- (j) **Police** – The **police** keep peace and protect people in the community.
- (k) **Treat** – Doctors **treat** sick people at the health center.

2. Form questions and answers using the structure
- (a) Using relative clauses with who and job titles
- Example
- A person who drives a car is a driver.
- One who makes chairs is a carpenter.
- (b) What does your ... (father, mother, sister) do everyday?
- Everyday my ... (father, mother, sister) goes to work at the Health Centre.
- Examples
- Question:** What does your father do every day?
- Answer:** Every day my father goes to work at the Health Centre
- (c) Why do ... (I, you, we, they) ... go to the (clinic/hospital)?
- (I, you, we, they) ... go to the (clinic/ hospital) because ...

3. Read the dialogue and answer the questions that follow

Dialogue: *Using Social Services*

Teacher: Good morning, class. Can anyone tell me how we use education services?

Bbosa: We use education services by going to school to learn reading and writing.

Teacher: Very good. What about health services?

mark: We use health services by visiting hospitals and clinics when we are sick.

Teacher: Excellent. How do we use communication services?

Jane: We use communication services by talking on the telephone and listening to the radio.

Teacher: Correct. And transport services?

Joan: We use transport services by traveling in taxis, buses, and trains.

Teacher: Good answer. How do we use water supply services?

Moses: We use water supply services by fetching clean water from taps and boreholes.

Teacher: Finally, how do we use security services?

James: We use security services by calling the police to protect people and property.

Teacher: Well done, children. All these services help us live better in our community.

Questions

- (a) How do we use education services?

Answer: We use education services by going to school to learn reading and writing.

- (b) Where do we go when we are sick?

Answer: We go to hospitals and clinics when we are sick.

- (c) How do communication services help us?

Answer: Communication services help us by allowing us to talk on the telephone and listen to the radio.

- (d) Which vehicles are used in transport services?

Answer: Taxis, buses, and trains are used in transport services.

- (e) Who protects people and property in the community?

Answer: The police protect people and property in the community.

4. Read the composition and answer the questions that follow

Composition: *The Importance of Social Services in Our Home*

Social services are very important in our homes because they help us live better lives. Education services help children to learn reading and writing. This makes our families literate and able to get good jobs in the future. Health services such as hospitals and clinics treat sick people and keep our families strong and healthy.

Communication services like telephones, radios, and televisions help us to share information quickly and know what is happening in the country. Transport services such as roads, taxis, and buses make it easy for us to move from one place to another and carry goods to our homes.

Water supply services provide clean water for drinking, cooking, and washing. This keeps our homes clean and safe. Security services protect people and property. They help families to live peacefully without fear.

In conclusion, social services are important because they make our homes safe, healthy, and happy.

Questions

- (a) Why is education important in our homes?

Answer: Education is important because it makes our families literate.

- (b) What do health services do for our families?

Health services treat sick people and keep our families healthy.

- (c) How do communication services help us?

Answer: Communication services help us to share information quickly.

- (d) Why do we need transport services?

Answer: We need transport services to move easily and carry goods to our homes.

- (e) Who protects people and property in our homes?

Answer: The police provide security and protect people and property in our homes.

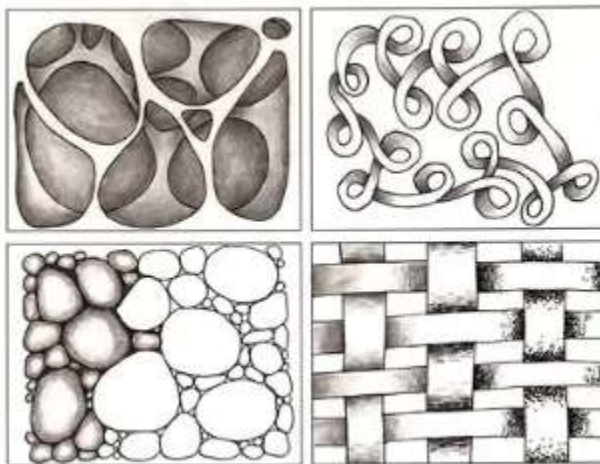
Creative Performing Arts 2.2

Exercise 2.2.3

1. Listen to recorded songs and dance according to rhythm.
2. Making string telephones and simple amplifiers



3. Copy the patterns



2.3 Challenges in social services and their possible solutions

Challenges in Social Services

1. Education

- **Challenge:** Schools have many demands such as books, desks, and teachers.

2. Health

- **Challenge:** There are not enough health centres, and medicine is expensive.

3. Transport

- **Challenge:** Roads are in poor condition, making travel difficult.

4. Communication

- **Challenge:** Radios, televisions, and newspapers are expensive.

5. Water Supply

- **Challenge:** Clean water is not always available or of good quality.

6. Security

- **Challenge:** Security services are sometimes not effective.



Possible Solutions

(i) Education

- Provide more teachers, books, and classrooms.
- Parents and government can support schools with resources.

(ii) Health

- Build more health centres in villages.
- Reduce the cost of medicine so families can afford treatment.

(iii) Transport

- Repair and maintain roads regularly.
- **Construct** new roads and bridges where needed.

(iv) Communication

- **Provide** affordable radios, televisions, and newspapers.
- **Encourage** community information sharing through meetings.

(v) Water Supply

- **Protect** rivers and wells from pollution.
- Build more boreholes and taps to supply clean water.

(vi) Security

- Train more police officers and provide them with equipment.
- Involve community members in keeping peace.

Exercise 2.3.1

1. What is one challenge faced in education?

Answer: One challenge faced in education is that schools have many demands such as books and teachers.

2. How can the problem of expensive medicine be solved?

Answer: The problem of expensive medicine can be solved by reducing the cost of medicine and building more health centres.

3. Why is transport a challenge in some communities?

Answer: Transport is a challenge because roads are in poor condition, making travel difficult.

4. What is the solution to the problem of expensive communication services?

Answer: The solution is to provide affordable radios, televisions, and newspapers.

5. How can security services be made more effective?

Answer: Security services can be made more effective by training more police officers and involving the community in keeping peace.

Teaching Tip: Pupils can role-play a “community meeting” where each group presents one challenge and its solution. This makes the lesson interactive and helps them understand how social services affect daily life.

Mathematics Competences 2.3

Adding two 2-digit numbers with carrying

Example 1

$$\begin{array}{r} 1 \\ 57 \\ + 89 \\ \hline 146 \end{array}$$

steps
 $> 7 + 9 = 16$, write 6 carry 1
 $> 1 + 5 + 8 = 14$

Example 2

$$\begin{array}{r} 1 \\ 56 \\ + 45 \\ \hline 101 \end{array}$$

steps
 $> 6 + 5 = 11$, write 1 carry 1
 $> 1 + 5 + 4 = 10$

Example 3

$$\begin{array}{r} 1 \\ 59 \\ + 65 \\ \hline 124 \end{array}$$

steps
 $> 9 + 5 = 14$, write 4 carry 1
 $> 1 + 5 + 6 = 12$

Exercise 2.3.2

Add

(a)
$$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$$

(b)
$$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$$

(c)
$$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$$

(d)
$$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$$

(e)
$$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$$

(f)
$$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$$

(g)
$$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$$

(h)
$$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$$

(i)
$$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$$

(j)
$$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$$

(k)	(l)	(m)	(n)	(o)
$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$	$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$	$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$	$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$	$\begin{array}{r} 59 \\ + 65 \\ \hline \end{array}$

Steps for Solving Word Problems in Addition

- (a) **Read the problem carefully** – Understand what is being asked.
- (b) **Identify the numbers** – Pick out the numbers in the story.
- (c) **Decide the operation** – If the problem is about *putting together* or *finding the total*, use addition.
- (d) **Add the numbers** – Work out the sum.
- (e) **Write the answer in a full sentence** – Always explain your answer clearly.

Examples

1. Jane has 5 mangoes. Her mother gives her 3 more. How many mangoes does Jane have in total?
Working: $5 + 3 = 8$
Answer: Jane has 8 mangoes in total.
2. A shop sold 12 books in the morning and 9 books in the afternoon. How many books were sold altogether?
Working: $12 + 9 = 21$
Answer: The shop sold 21 books altogether.
3. Peter has 25 goats. His uncle gives him 15 more goats. How many goats does Peter have now?
Working: $25 + 15 = 40$
Answer: Peter has 40 goats now.

Exercise 2.3.2

1. Mary has 7 oranges. Her friend gives her 6 more. How many oranges does she have?
2. A farmer has 18 cows. He buys 12 more. How many cows does he have now?
3. A class has 24 boys and 19 girls. How many pupils are in the class?
4. A shopkeeper sold 35 pencils on Monday and 28 pencils on Tuesday. How many pencils did he sell in total?

5. John read 15 pages in the morning and 20 pages in the evening. How many pages did he read altogether?

 Answers

1. $7 + 6 = 13 \rightarrow$ Mary has 13 oranges.
2. $18 + 12 = 30 \rightarrow$ The farmer has 30 cows.
3. $24 + 19 = 43 \rightarrow$ The class has 43 pupils.
4. $35 + 28 = 63 \rightarrow$ The shopkeeper sold 63 pencils in total.
5. $15 + 20 = 35 \rightarrow$ John read 35 pages altogether.

Teaching Tip: Pupils can use counters (stones, bottle tops, sticks) to act out the word problems before writing the sums. This makes the problems more concrete and fun.

Literacy Competences 2.3

Exercise 2.3.2

1. Read the story below and answer the questions that follow

Story: *Helping Our Community*

In Kijani village, people faced many problems with their social services. The school had few teachers and not enough books. Children sat on the floor because there were no desks.

The health center was small and had only one nurse. Many sick people had to wait for a long time to get medicine.

The roads were full of holes, making it hard for farmers to take food to the market.

The water well was dirty, and some families had no clean water to drink.

But the community decided to work together. Parents helped the school by buying desks and books. The government sent more teachers.

The health center was expanded, and new nurses were trained. Roads were repaired, and bridges were built.

The village also dug a new borehole to provide clean water. Everyone was happy because the challenges were solved through teamwork.

Questions

(a) What challenge did the school face?

Answer: The school had few teachers and not enough books.

(b) Why was the health center a problem?

Answer: The health center was small and had only one nurse.

(c) What made transport difficult in the village?

Answer: The roads were full of holes.

(d) How did the community solve the water problem?

Answer: They dug a new borehole to provide clean water.

(e) What lesson can we learn from the story?

Answer: We learn that challenges can be solved when people work together.

Teaching Tip: Pupils can act out this story in groups — one group shows the challenges, and another group shows the solutions. This makes the lesson lively and easy to remember.

2. Read the dialogue and answer the questions that follow

Dialogue: *Solving Our Social Service Problems*

Teacher: Good morning, class. Today we shall talk about problems in our social services. Can anyone tell me one problem?

Bbosa: Our school has few teachers and not enough books.

Teacher: Yes, that is a big challenge. What can be done to solve it?

Nakiguli: The government can send more teachers, and parents can help buy books.

Teacher: Very good. What about health services?

Eron: The health center is small and has only one nurse.

Teacher: That is true. How can we solve this problem?

Aida: The government can build a bigger health center and train more nurses.

Teacher: Excellent. Now, what problem do we face with transport?

Mark: The roads are full of holes, and cars get stuck.

Teacher: How can this be solved?

Joel: Roads can be repaired and bridges built.

Teacher: Wonderful answers. Finally, what about water?

Monica: The well is dirty, and people drink unsafe water.

Teacher: What is the solution?

James: We can dig a new borehole and keep it clean.

Teacher: Well done, class. We have learned that problems can be solved when people work together.

Questions

(a) What problem did the school face?

Answer: The school had few teachers and not enough books.

(b) How can the health center problem be solved?

Answer: By building a bigger health center and training more nurses.

(c) What challenge was found in transport?

Answer: The roads were full of holes.

(d) What solution was given for the water problem?

Answer: Digging a new borehole and keeping it clean.

(e) What lesson do we learn from the dialogue?

Answer: We learn that problems can be solved when people work together.

Teaching Tip: You can let pupils role-play this dialogue in pairs or groups. One group presents the problems, and another group gives the solutions. This makes the lesson interactive and memorable.

3. Match problems to solutions

Few books

train more police officer

small health center

construct bigger roads

narrow roads

buy more books

expensive communication objects

Build borehole

dirty water

train more nurses

insecurity

cheaper radios

Proverbs with Meaning and Lesson

1. **“Unity is strength.”**
 - **Meaning:** People are stronger when they work together.
 - **Lesson:** Cooperation helps solve problems.
2. **“Health is wealth.”**
 - **Meaning:** Being healthy is more valuable than having money.
 - **Lesson:** We must take care of our health.
3. **“Education is the key to success.”**
 - **Meaning:** Learning opens doors to opportunities.
 - **Lesson:** Children should study hard in school.
4. **“A stitch in time saves nine.”**
 - **Meaning:** Solving a small problem early prevents bigger problems later.
 - **Lesson:** Do not delay in solving challenges.
5. **“Cleanliness is next to godliness.”**
 - **Meaning:** Being clean shows respect for oneself and others.
 - **Lesson:** We should keep our bodies and environment clean.
6. **“Water is life.”**
 - **Meaning:** Without water, people, animals, and plants cannot survive.
 - **Lesson:** Protect and use water wisely.
7. **“Hard work pays.”**
 - **Meaning:** Effort brings good results.
 - **Lesson:** Always work hard to achieve success.
8. **“A friend in need is a friend indeed.”**
 - **Meaning:** True friends help each other in difficult times.
 - **Lesson:** Be kind and supportive to friends.

9. **“The early bird catches the worm.”**

- **Meaning:** Those who start early succeed first.
- **Lesson:** Do your work on time.

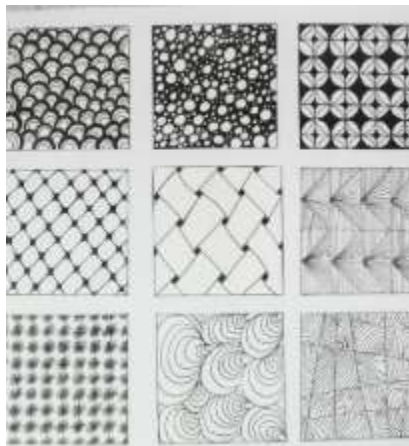
10. **“No food without farming.”**

- **Meaning:** Farming provides food for everyone.
- **Lesson:** Respect farmers and their work.

Teaching Tip: You can group these proverbs into themes — *Education, Health, Unity, Work, Environment* — and let pupils create short role-plays or drawings to show their meaning.

Exercise 2.3.3

1. Write five examples of proverbs
2. Copy the following patterns



English (non-medium) Competences 2.3

Exercise 2.3.4

1. Write one sentence each for each of the following vocabulary: storm, mud, slash, bridge, police post, accidents, boil, spray, mosquito net.

Example sentences: let pupils read the sentences loudly

- (i) **Storm** – The storm blew away the roof of the house.
- (ii) **Mud** – Children played in the mud after the rain.

- (iii) **Slash** – The farmer used a panga to slash the grass.
- (iv) **Bridge** – Pupils crossed the river using the bridge.
- (v) **Police post** – The thief was taken to the police post.
- (vi) **Accidents** – Accidents happen when drivers do not follow road rules.
- (vii) **Boil** – Mother will boil water before we drink it.
- (viii) **Spray** – The farmer will spray the crops to kill pests.
- (ix) **Mosquito net** – We sleep under a mosquito net to avoid malaria.

Use of “because”

- The word **because** is a **connective**.
- It is used to **show reason** in a sentence.

Example Sentences

- (i) I stayed at home **because** it was raining.
- (ii) She is happy **because** she passed her exam.
- (iii) We eat food **because** it gives us energy.
- (iv) The pupils are quiet **because** the teacher is speaking.
- (v) He is late **because** the road is muddy.

Exercise 2.3.5

Complete the sentences by adding a reason with *because*:

- 1. I am smiling _____.
- 2. The boy is running _____.
- 3. We are washing our hands _____.
- 4. She is carrying an umbrella _____.
- 5. The pupils are reading books _____.

Suggested Full-Sentence Answers

- 1. I am smiling **because I am happy**.
- 2. The boy is running **because he wants to catch the bus**.
- 3. We are washing our hands **because we want to stay healthy**.
- 4. She is carrying an umbrella **because it is raining**.
- 5. The pupils are reading books **because they want to learn**.

Use of Past Tense

- The **past tense** is used to talk about actions that **happened before now**.
- Most regular verbs form the past tense by adding **–ed**.
- Some verbs are **irregular** and change completely (e.g., *go* → *went*).

Examples of Past Tense in Daily Activities

- (a) I **played** football yesterday.
- (b) She **washed** her clothes last evening.
- (c) We **went** to school in the morning.
- (d) The teacher **taught** us a new song.
- (e) He **ate** bread for breakfast.

Exercise 2.3.6

1. What is the past tense of *play*?

Answer: The past tense of *play* is *played*.

2. Which verb changes to *went* in the past tense?

Answer: The verb *go* changes to *went*.

3. Why do we use the past tense?

Answer: We use the past tense to show actions that happened before now.

4. What is the past tense of *eat*?

Answer: The past tense of *eat* is *ate*.

5. Give one sentence in the past tense.

Answer: I **washed** my clothes yesterday.

Teaching Tip: Pupils can act out short role-plays where they tell what they did “yesterday” or “last evening” using past tense verbs. This makes grammar practice fun and memorable.

Exercise 2.3.6

Fill in with the correct form of the verb in brackets

1. Yesterday, I _____ (walk) to school.
2. The pupils _____ (read) their books last night.
3. Mother _____ (cook) rice for supper.
4. We _____ (drink) milk in the morning.
5. The boy _____ (run) very fast in the race.

Suggested Full-Sentence Answers

1. Yesterday, I **walked** to school.
2. The pupils **read** their books last night.
3. Mother **cooked** rice for supper.
4. We **drank** milk in the morning.
5. The boy **ran** very fast in the race.

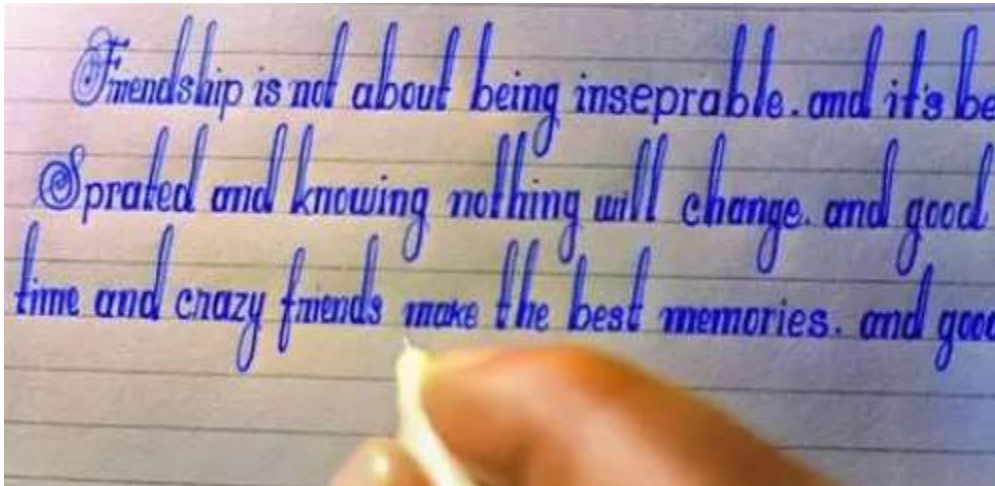
Exercise 2.3.6

Form questions and answers based on the structure

1. How did ... (she/he/you, they) fall into mud?
(I/she/he/they) ... jumped off the ... (bridge, bicycle) on the road.
Example
How did she fall into mud?
She jumped off the bridge on the road.
2. What did ... (you/he/she/they) ... do yesterday?
(I/she/he/they/we) ... slashed the ... (compound) yesterday.
3. What do ... (you/we/they) do when.... (you/we/they).... (get an accident/ are in danger/there is a storm)?
I/we/they ... (report to the police post/take shelter) when ...
I/ he/she/they/we) cannot go to school/hospital) because the bridge broke down.

Creative Performing Arts 2.4

1. Dance according to the tune of recorded music
2. Listen to a simple recorded song and answer comprehension questions.
3. Weave items using local materials.
4. Print art items using different local materials.
5. Practice the handwriting below



THEME 3: OUR ENVIRONMENT IN OUR SUB-COUNTY / DIVISION

Expected learning outcome: The child appreciates environmental changes and applies the acquired knowledge and skills to manage the environment.

3.1 Soil

Composition of Soil

Soil is made up of different materials that work together to support life:

1. **Water**
 - Found in spaces between soil particles.
 - Helps plants grow by dissolving nutrients for roots.
2. **Air**
 - Fills the gaps between soil particles.
 - Provides oxygen for roots and soil organisms.
3. **Dead Plants and Animals (Organic Matter / Humus)**
 - Decayed leaves, stems, and animal remains.
 - Improves soil fertility and structure.
4. **Particles of Rocks (Minerals)**
 - Sand, silt, and clay formed from weathered rocks.
 - Give soil its texture and supply minerals like calcium and iron.

Exercise 3.1.1

1. What part of soil helps plants take in nutrients?

Answer: Water helps plants take in nutrients.

2. Why is air important in soil?

Answer: Air is important because it provides oxygen for roots and organisms.

3. What do dead plants and animals add to soil?

Answer: Dead plants and animals add fertility to soil.

4. What are soil particles made from?

Answer: Soil particles are made from weathered rocks like sand, silt, and clay.

5. Why is soil important for life?

Answer: Soil is important because it supports plant growth, which provides food and oxygen for living things.

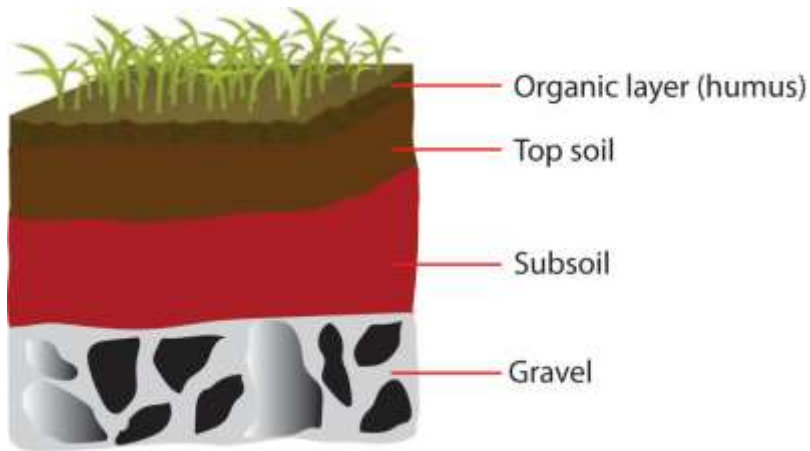
Teaching Tip: Pupils can draw a **soil cross-section diagram** showing water, air, humus, and rock particles. This makes the lesson visual and easy to remember.

Types of Soil and Their Texture

Type of Soil	Texture / Feel	Description
Sand	Rough, large particles	Feels gritty; water drains quickly; not fertile.
Clay	Smooth, slippery, powdery	Holds water for long; sticky when wet; good for making pots.
Loam	Balanced mix of sand, clay, and humus	Soft and rich; best for farming because it holds water and air well.



Soil Profile/Layers of Soil



1. Top Soil

- Upper layer where plants grow.
- Contains humus (dead plants and animals).

2. Sub-Soil

- Found below top soil.
- Has fewer nutrients and more rock particles.

3. Gravel Layer

- Deepest layer made of stones and large rock pieces.
- Helps drain water.

4. Humus

- Formed when **dead plants and animals decay**.
- Makes soil fertile and helps crops grow well.

Exercise 3.1.2

1. What type of soil has large, rough particles?

Answer: Sand has large, rough particles.

2. Which soil feels smooth and slippery?

Answer: Clay feels smooth and slippery.

3. Why is loam good for farming?

Answer: Loam is good for farming because it holds water and air well.

4. What is found in the top soil?

Answer: Humus from dead plants and animals is found in the top soil.

5. What is the role of gravel in soil layers?

Answer: Gravel helps to drain water in the soil.

Teaching Tip: Pupils can bring samples of sand, clay, and loam to class, touch them, and describe how each feels. Then they can draw a **soil layer diagram** showing top soil, sub-soil, and gravel.

Uses of Soil

1. **Farming**

- Soil provides nutrients and water for crops like maize, beans, and bananas.

2. **Building**

- Soil is used to make bricks, cement mixtures, and to build houses and roads.

3. **Pottery and Artwork**

- Clay soil is used to make pots, dolls, and sculptures.

4. **Habitat**

- Soil is home to animals like earthworms, ants, and termites.

5. **Filtration**

- Soil helps filter and store water underground.

6. **Raw Materials**

- Soil provides sand, clay, and gravel for construction.

Exercise 3.1.3

1. Name one use of soil in farming.
2. Which type of soil is used to make pots?
3. How does soil help in water supply?
4. Mention one animal that lives in soil.
5. Why is soil important for building houses?

✓ Suggested Answers

1. Soil is used to grow crops like maize and beans.
2. Clay soil is used to make pots.
3. Soil filters and stores water underground.
4. Earthworms live in soil.
5. Soil is important because it provides materials like sand and clay for building houses.

Teaching Tip: Pupils can bring small soil samples (sand, clay, loam) and discuss which use each type is best for. They can also make simple clay models to connect soil with artwork.

Compost Pit / Pile



A compost pit or pile is a place where **organic waste** (like food remains, grass, leaves, and animal droppings) is collected and allowed to **rot naturally** to form **compost manure**.

Steps in Making a Compost Pit

- (i) **Select a site** – Choose a place with good drainage, away from water sources.
- (ii) **Dig a pit** – About 1–1.5 meters deep.
- (iii) **Layer materials** – Put organic waste (leaves, peelings, grass) in layers, alternating with soil or ash.
- (iv) **Add water** – Sprinkle water to keep it moist.
- (v) **Cover the pit** – Use grass or soil to reduce smell and keep away pests.
- (vi) **Turn the materials** – Mix occasionally to allow air in.
- (vii) **Wait for decomposition** – After 2–3 months, the waste turns into dark, fertile compost.

Uses of Compost

- (i) Improves soil fertility.
- (ii) Provides nutrients for crops.
- (iii) Reduces need for chemical fertilizers.
- (iv) Helps recycle waste in a clean way.

Exercise 3.1.4

1. **Question:** What is a compost pit used for?

Answer: A compost pit is used to make manure from organic waste.

2. **Question:** Why should we add water to a compost pit?

Answer: We add water to keep the compost moist and help it rot faster.

3. **Question:** What should not be put in a compost pit?

Answer: Plastics, metals, and harmful chemicals should not be put in a compost pit.

4. **Question:** How long does it take for compost to be ready?

Answer: Compost is ready after about 2–3 months.

Teaching Tip: Pupils can draw a **diagram of a compost pit cross-section** showing layers of waste, soil, and humus. This makes the lesson visual and memorable.

Mathematics Competences 3.1

Exercise 3.1.4

1. Count from 2000 – 3000
2. Write numbers between
 - (a) 2010 and 2025
 - (b) 2154 and 2165
 - (c) 2516 and 1520
 - (d) 2702 and 2781
 - (e) 2913 and 3000

3. Add

a.
$$\begin{array}{r} 123 \\ + 321 \\ \hline \end{array}$$

f.
$$\begin{array}{r} 163 \\ + 122 \\ \hline \end{array}$$

k.
$$\begin{array}{r} 123 \\ + 523 \\ \hline \end{array}$$

p.
$$\begin{array}{r} 223 \\ + 376 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 456 \\ + 321 \\ \hline \end{array}$$

g.
$$\begin{array}{r} 513 \\ + 324 \\ \hline \end{array}$$

i.
$$\begin{array}{r} 723 \\ + 225 \\ \hline \end{array}$$

q.
$$\begin{array}{r} 653 \\ + 124 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 323 \\ + 324 \\ \hline \end{array}$$

h.
$$\begin{array}{r} 623 \\ + 351 \\ \hline \end{array}$$

m.
$$\begin{array}{r} 177 \\ + 321 \\ \hline \end{array}$$

r.
$$\begin{array}{r} 823 \\ + 141 \\ \hline \end{array}$$

d.
$$\begin{array}{r} 523 \\ + 334 \\ \hline \end{array}$$

i.
$$\begin{array}{r} 173 \\ + 821 \\ \hline \end{array}$$

n.
$$\begin{array}{r} 153 \\ + 624 \\ \hline \end{array}$$

s.
$$\begin{array}{r} 423 \\ + 363 \\ \hline \end{array}$$

e.
$$\begin{array}{r} 623 \\ + 342 \\ \hline \end{array}$$

j.
$$\begin{array}{r} 323 \\ + 326 \\ \hline \end{array}$$

o.
$$\begin{array}{r} 723 \\ + 265 \\ \hline \end{array}$$

t.
$$\begin{array}{r} 426 \\ + 351 \\ \hline \end{array}$$

Place Values of 4-Digit Numbers

A **4-digit number** has **Thousands, Hundreds, Tens, and Ones**. Each digit shows its value depending on its position.

Examples

(a) Number: 4,326

- Thousands = 4 → means 4000
- Hundreds = 3 → means 300
- Tens = 2 → means 20
- Ones = 6 → means 6
- So, $4,326 = 4000 + 300 + 20 + 6$.

(b) Number: 7,105

- Thousands = 7 → means 7000
- Hundreds = 1 → means 100
- Tens = 0 → means 0
- Ones = 5 → means 5
- So, $7,105 = 7000 + 100 + 0 + 5$.

(c) Number: 9,842

- Thousands = 9 → means 9000
- Hundreds = 8 → means 800
- Tens = 4 → means 40
- Ones = 2 → means 2
- So, $9,842 = 9000 + 800 + 40 + 2$.

Exercise 3.1.5

1. Break down the number **5,430** into thousands, hundreds, tens, and ones.
2. What is the value of the hundreds in **6,219**?
3. Write **8,064** in expanded form.
4. In the number **2,578**, what is the value of the tens?
5. What is the value of the thousands in **3,901**?

Suggested Answers

1. $5,430 = 5000 + 400 + 30 + 0$.
2. Hundreds = 2 $\rightarrow$ means 200.
3. $8,064 = 8000 + 0 + 60 + 4$.
4. Tens = 7 $\rightarrow$ means 70.
5. Thousands = 3 $\rightarrow$ means 3000.

Teaching Tip: Pupils can use sticks, bottle tops, or counters to represent **thousands, hundreds, tens, and ones**. For example, bundle 10 sticks into a group for tens, 100 sticks for hundreds, and 1000 sticks for thousands.

Exercise 3.1.6

Which numbers have been expanded (answers given in square brackets)

- | | | |
|-------|-----------------------|--------|
| (i) | $6000 + 400 + 30 + 6$ | [6436] |
| (ii) | $5000 + 5$ | [5005] |
| (iii) | $4000 + 30$ | [4030] |
| (iv) | $3000 + 500$ | [3500] |
| (v) | $2000 + 700 + 2$ | [2702] |
| (vi) | $1000 + 20 + 5$ | [1025] |

Measuring Soil with Non-Standard Units

1. By Handfuls

Aim: To compare amounts of soil.

Materials: Sand, clay, loam, three bowls.

Steps: Scoop soil using your hand (one handful). Count how many handfuls fill each bowl.

Observation: Pupils record how many handfuls were needed for each soil type.

Conclusion: Soil can be measured using **handfuls**.

2. By Cups

Aim: To measure soil using small containers.

Materials: Plastic cups, soil samples.

Steps: Fill a cup with sand, another with clay, another with loam. Count how many cups fill a tin.

Observation: Pupils note differences in texture and how many cups are needed.

Conclusion: Soil can be measured using **cups**.

3. By Stones (Weight)

Aim: To compare heaviness of soils.

Materials: Soil samples, small stones, simple balance.

Steps: Place soil on one side of the balance. Add stones on the other side until it balances. Count the stones.

Observation: Clay may need more stones because it is heavier than sand.

Conclusion: Soil can be measured using **stones** as non-standard units of weight.

Exercise 3.1.7

1. How can soil be measured using hands?

2. What container can be used to measure soil?
3. Which soil is heavier when measured with stones?
4. Why do we use non-standard units in class?
5. Give one example of a non-standard unit for measuring soil.



Suggested Answers

6. Soil can be measured using handfuls.
7. Soil can be measured using cups.
8. Clay soil is heavier when measured with stones.
9. We use non-standard units because they are simple and easy for pupils to understand.
10. One example is a handful.

Teaching Tip: Pupils can work in groups, each group using a different non-standard unit (handfuls, cups, stones). Afterwards, they compare results and discuss which soil is heavier, rougher, or softer.

Literacy Competences 3.1

Exercise 3.1.8

1. Name the types of soil
2. Describe the composition of soil
3. Discuss the uses of soil
4. Write five sentences about soil

Experiments on soil

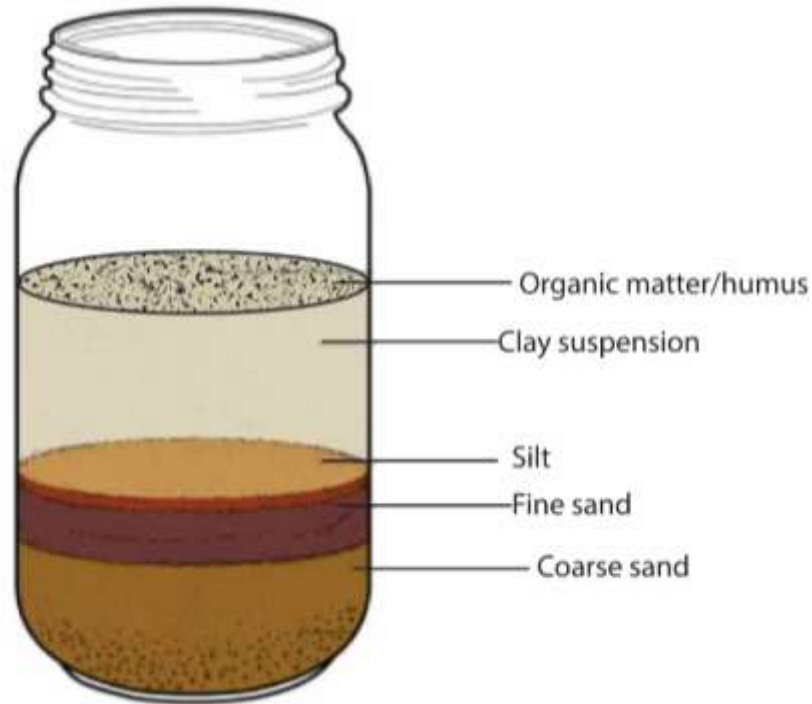
1. Composition of Soil

Aim: To find out what soil is made of. **Materials:** A clear jar, water, soil sample, spoon.

Steps:

- (i) Put soil into the jar.
- (ii) Add water until half full.
- (iii) Stir well and leave it to settle.

Observation:



Layers form — stones at the bottom, sand above, fine particles next, and floating leaves or insects on top.

Conclusion: Soil is made up of **rock particles, water, air, and dead plants/animals.**

2. Soil Profile

Aim: To observe soil layers. **Materials:** Spade, clear container or hole in the ground.

Steps:

- (i) Dig a small hole.
- (ii) Look at the layers.

Observation:

- **Topsoil** (dark, rich in humus)

- **Subsoil** (lighter, harder)
- **Gravel/rock layer** at the bottom

Conclusion: Soil has layers called **topsoil, subsoil, and gravel layer**.

3. **Experiment: Soil Texture**

Aim: To test how soils feel. **Materials:** Samples of sand, clay, loam, water. **Steps:**

- (i) Add a little water to each soil sample.
- (ii) Rub between fingers.

Observation:

- Sand feels rough and gritty.
- Clay feels smooth and sticky.
- Loam feels soft and balanced.

Conclusion: Different soils have different **textures**.

Exercise 3.1.9

1. What materials are needed to test soil composition?
2. Which soil layer is rich in humus?
3. How does clay feel when rubbed with water?
4. Name the three main soil textures.
5. Why is topsoil important?



Suggested Answers

1. Jar, water, soil sample, spoon.
2. Topsoil.
3. Smooth and sticky.
4. Sand, clay, loam.

5. It helps plants grow because it has humus.

Teaching Tip: Let pupils work in small groups, record their findings in a table, and draw diagrams of soil layers and textures.

Exercise 3.1.10

Read the poem and answer questions that follow

Poem: *What Is in the Soil?*

Soil has water, cool and clear,
Helping roots to grow each year.

Soil has air in tiny space,
Giving life a breathing place.

Dead plants and animals turn to humus,
Making soil rich, strong, and famous.

Rock particles — sand, clay, and silt,
Form the body where crops are built.

Together they make the earth we know,
Helping our gardens and food to grow.

Questions

1. What does water in soil do?

Answer: Water in soil helps roots to grow and take in food.

2. Why is air important in soil?

Answer: Air is important because it gives roots and organisms oxygen.

3. What do dead plants and animals become in soil?

Answer: Dead plants and animals become humus that makes soil fertile.

4. What are soil particles made from?

Answer: Soil particles are made from sand, clay, and silt.

5. Why is soil important for crops?

Answer: Soil is important because it supports crops and helps them grow.

Teaching Tip: Pupils can recite the poem in groups, then answer the questions orally. You can also ask them to **draw a soil diagram** showing water, air, humus, and rock particles to connect poetry with science.

Exercise 3.1.11

Read the story and answer questions that follow

Story: A Walk in the Garden

One morning, Sarah went with her teacher to the school garden. The teacher dug a small hole in the ground. Sarah saw the **dark topsoil**. It was soft and full of humus. "This is where plants grow well," said the teacher.

Below the topsoil, Sarah noticed the **subsoil**. It was lighter in color and harder. "This layer has fewer nutrients," explained the teacher.

At the bottom, Sarah saw the **gravel layer**. It was full of stones and big rock pieces. "This layer helps water to drain," said the teacher.

Sarah smiled. "Now I know soil has three layers: topsoil, subsoil, and gravel."

Questions

1. Where did Sarah go with her teacher?

Answer: Sarah went to the school garden with her teacher.

2. What did Sarah see in the topsoil?

Answer: Sarah saw dark, soft soil full of humus in the topsoil.

3. How is the subsoil different from the topsoil?

Answer: The subsoil is lighter in color and harder than the topsoil.

4. What is found in the gravel layer?

Answer: The gravel layer has stones and big rock pieces.

5. How many layers of soil did Sarah learn about?

Answer: Sarah learned about three layers of soil.

Teaching Tip: Pupils can draw a **soil profile diagram** showing the three layers, then label them as topsoil, subsoil, and gravel.

English (non-medium) Competences 3.1

Exercise 3.1.12

1. Write one sentence for each of the following vocabulary: **soil, stones, sand, clay, stove, color, build, crop, houses, loam, white, black, brown, grey**

Sample answers – let pupil read the sentences loudly and explain their meanings

- (a) **Soil** – Farmers use soil to grow crops.
- (b) **Stones** – Children picked stones from the playground.
- (c) **Sand** – Sand is found near the river.
- (d) **Clay** – Clay is used to make pots.
- (e) **Stove** – Mother cooked food on the stove.
- (f) **Color** – The rainbow has many colors.
- (g) **Build** – Workers build houses with bricks.
- (h) **Crop** – Maize is an important crop in the village.

- (i) **Houses** – People live in houses to stay safe.
- (j) **Loam** – Loam soil is good for farming.
- (k) **White** – The clouds are white.
- (l) **Black** – The night sky is black.
- (m) **Brown** – The soil in the garden is brown.
- (n) **Grey** – The stones on the road are grey.

2. Form questions and answers using the following structure

- (a) What is(clay/sand/loam)used for?
(I/we/they) use ... (clay/loam) sand) soil to ... (make pots, grow crops / build houses).

Example

What is clay used for?

I Use clay soil to make pots

- (b) There are many.... (stones/ crops/buildings) in our sub county/division.
- (c) What color is ... (clay, sand, loam) soil?
It is ... (black, grey, brown, white) soil.

3. Read the dialogue and answer the questions that follow:

Dialogue: *Talking About Soil*

Teacher: Good morning, class! Can anyone tell me one use of soil? **Pupil A:** Soil is used for growing crops like maize and beans.

Teacher: Very good. Who knows another use? **Pupil B:** Soil is used to make bricks for building houses.

Teacher: Excellent. What else can soil be used for? **Pupil C:** Clay soil is used to make pots and dolls.

Teacher: Wonderful. Can soil also help animals? **Pupil D:** Yes, teacher. Animals like earthworms and ants live in soil.

Teacher: Well done! So, soil is very important in our daily life.

Questions

- (a) What is one use of soil in farming?

Answer: Soil is used to grow crops like maize and beans.

- (b) What can be made from soil for building?

Answer: Soil can be used to make bricks for building houses.

- (c) Which type of soil is used to make pots?

Answer: Clay soil is used to make pots.

- (d) Name one animal that lives in soil.

Answer: Earthworms live in soil.

- (e) Why is soil important in our daily life?

Answer: Soil is important because it gives us food, houses, and homes for animals.

Teaching Tip: Pupils can role-play this dialogue in groups, acting as teacher and pupils. This makes the lesson interactive and fun while reinforcing the uses of soil.

Creative Performing Arts 3.1

1. Dance according to recorded music rhythms.
2. Singing/signing a simple melody up to 8 notes long without leaps: d d r m d d r d
3. Instrumental work, e.g. playing tuned percussion music instruments found in locality, e.g. xylophone, and drums)
4. Make collage using soils and stones
5. String painting e.g.



6. Make models using soil

3.2 Natural causes of changes in the environment

Natural environmental disasters

- a) **Floods** – Heavy rains make rivers and lakes overflow.
- b) **Drought** – Lack of rain and too much sun dries the land.
- c) **Earthquakes** – The ground shakes due to movements inside the earth.
- d) **Hailstones** – Frozen rain falls as small balls of ice.
- e) **Landslides** – Soil and rocks slide down hills after heavy rain.
- f) **Storms** – Strong winds and heavy rains damage property.
- g) **Lightning** – Electric charges in clouds during storms.
- h) **Thunder** – The loud sound that follows lightning.

Effects of Environmental disasters

- (i) **Hunger** – Crops are destroyed by floods or drought.
- (ii) **Destruction of Homes and Property** – Earthquakes, storms, and floods break houses, roads, and schools.
- (iii) **Destruction of Plants and Animals** – Landslides, droughts, and storms kill plants and animals.
- (iv) **Soil Erosion** – Heavy rains wash away fertile soil.
- (v) **Diseases / Epidemics** – Floods spread diseases like cholera and malaria.
- (vi) **Migration** – People move to safer places when disasters occur.

Ways of Managing Environmental Changes

- (i) **Planting Trees** – Prevents soil erosion and reduces floods.
- (ii) **Building Strong Houses** – Protects people from storms and earthquakes.
- (iii) **Digging Drainage Channels** – Helps control floods.

- (iv) **Storing Food and Water** – Helps during droughts.
- (v) **Using Mosquito Nets and Boiling Water** – Prevents diseases after floods.
- (vi) **Community Preparedness** – People work together to help each other during disasters.

Exercise 3.2.1

1. What causes floods?
2. Name one effect of drought.
3. Which disaster makes the ground shake?
4. How can we prevent soil erosion?
5. Why do people migrate after disasters?



Suggested Answers

1. Floods are caused by heavy rains.
2. Drought causes hunger because crops dry up.
3. Earthquakes make the ground shake.
4. We can prevent soil erosion by planting trees.
5. People migrate to find safer places with food and shelter.

Teaching Tip: Pupils can make a **Cause → Effect → Management chart** (e.g., *Flood → Hunger → Dig drainage channels*). This helps them connect natural changes with their impacts and solutions.

Weather Instruments and Their Uses



Thermometer



Rain gauge



Barometer

Instrument	What It Measures	Use in Daily Life
Thermometer	Temperature (hot or cold)	Helps farmers and doctors know heat levels
Rain Gauge	Amount of rainfall	Guides farmers when to plant crops
Barometer	Air pressure	Helps predict storms and weather changes
Wind Vane	Wind direction	Used at airports for flight safety
Anemometer	Wind speed	Important for fishing and aviation
Hygrometer	Humidity (moisture in air)	Guides crop storage and weather forecasting
Sunshine Recorder	Hours of sunshine	Used in agriculture and solar energy
Ceilometer	Cloud height and cover	Helps in aviation weather reports



Wind Vane



Anemometer



Hygrometer

Exercise 3.2.2

1. Which instrument measures temperature?
2. What does a rain gauge measure?
3. Why is a barometer important?
4. Which instrument shows the direction of wind?
5. How is sunshine measured?

✓ Suggested Answers

1. A thermometer measures temperature.
2. A rain gauge measures rainfall.
3. A barometer is important because it helps predict storms.
4. A wind vane shows the direction of wind.
5. Sunshine is measured using a sunshine recorder.

Teaching Tip: Pupils can make a **mini weather station model** using simple materials (plastic bottle rain gauge, paper wind vane, etc.) to understand how instruments work.

Mathematics Competences 3.2

Exercise 3.2.2

1. Make weather chart and record weather for 3 weeks.

Adding two 3 – digit numbers vertically with carrying

Example 1

$\begin{array}{r} 11 \\ 567 \\ + 756 \\ \hline 1323 \end{array}$	steps > $7 + 6 = 13$, write 3 carry 1 > $1 + 6 + 5 = 12$, write 2 carry 1 > $1 + 5 + 7 = 13$
--	---

Example 2

$\begin{array}{r} 11 \\ 468 \\ + 796 \\ \hline 1264 \end{array}$	steps > $8 + 6 = 14$, write 4 carry 1 > $1 + 6 + 9 = 16$, write 6 carry 1 > $1 + 4 + 7 = 12$
--	---

Example 3

$\begin{array}{r} 11 \\ 597 \\ + 894 \\ \hline 1491 \end{array}$	steps > $7 + 4 = 11$, write 1 carry 1 > $1 + 9 + 9 = 19$, write 9 carry 1 > $1 + 5 + 8 = 14$
--	---

Exercise 3.2.3

Add

a.
$$\begin{array}{r} 663 \\ + 547 \\ \hline \\ \hline \end{array}$$

f.
$$\begin{array}{r} 963 \\ + 157 \\ \hline \\ \hline \end{array}$$

k.
$$\begin{array}{r} 888 \\ + 523 \\ \hline \\ \hline \end{array}$$

p.
$$\begin{array}{r} 925 \\ + 376 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{b.} \quad 456 \\ + 847 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{g.} \quad 513 \\ + 898 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{i.} \quad 723 \\ + 998 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{q.} \quad 657 \\ + 864 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{c.} \quad 577 \\ + 464 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{h.} \quad 659 \\ + 751 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{m.} \quad 677 \\ + 323 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{r.} \quad 853 \\ + 447 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{d.} \quad 978 \\ + 334 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{i.} \quad 393 \\ + 825 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{n.} \quad 459 \\ + 654 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{s.} \quad 487 \\ + 663 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{e.} \quad 623 \\ + 699 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{j.} \quad 778 \\ + 386 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{o.} \quad 726 \\ + 465 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{t.} \quad 826 \\ + 354 \\ \hline \\ \hline \end{array}$$

Algebra in Addition

Algebra uses a **blank space** or a **letter (like x)** to stand for an unknown number. We solve by finding the missing number that makes the sum correct.

Example 1:

$$3 + \underline{\quad} = 8$$

Step 1: Think: "What number added to 3 gives 8?"

Step 2: Subtract 3 from 8 $\rightarrow 8 - 3 = 5$

Answer: The missing number is **5**.

 So, $3 + 5 = 8$

Example 2:

$$\underline{\quad} + 30 = 80$$

Step 1: Think: “What number added to 30 gives 80?”

Step 2: Subtract 30 from 80 $\rightarrow 80 - 30 = 50$

Answer: The missing number is **50**.

 So, $50 + 30 = 80$

Exercise 3.2.4

Find the missing numbers:

1. $7 + \underline{\quad} = 12$
2. $\underline{\quad} + 25 = 60$
3. $14 + \underline{\quad} = 20$
4. $\underline{\quad} + 40 = 100$
5. $9 + \underline{\quad} = 15$

 Answers

1. $7 + 5 = 12 \rightarrow$ Missing number = **5**
2. $35 + 25 = 60 \rightarrow$ Missing number = **35**
3. $14 + 6 = 20 \rightarrow$ Missing number = **6**
4. $60 + 40 = 100 \rightarrow$ Missing number = **60**
5. $9 + 6 = 15 \rightarrow$ Missing number = **6**

Teaching Tip: Write the problems on the board with blanks. Let pupils use counters or bottle tops to “fill in” the missing number. This makes algebra fun and concrete.

Literacy Competences 3.2

Exercise 3.2.5

1. List five natural disasters.

Answer

- (i) **Floods** – caused by heavy rains or overflowing rivers.
- (ii) **Storms** – strong winds that damage houses and trees.
- (iii) **Droughts** – long periods without rain leading to hunger.
- (iv) **Volcanoes** – hot lava and ash erupting from mountains.
- (v) **Earthquakes** – shaking of the ground that breaks buildings and roads.
- (vi) **Hailstorms** – falling ice stones that destroy crops and roofs.
- (vii) **Landslides** – soil and rocks sliding down hills or mountains.
- (viii) **Lightning & Thunder** – sudden flashes and sounds that can cause fires or damage.

Teaching Tip: Pupils can make a **chart** with three columns:

- a) **Disaster** (e.g., Floods)
- b) **Cause** (e.g., Heavy rains)
- c) **Effect** (e.g., Houses destroyed)

This helps them connect disasters to their causes and effects.

2. Ways of managing environmental disasters

Answer

- (i) **Planting Trees**

Trees prevent soil erosion, reduce floods, and bring rain.

- (ii) **Proper Waste Disposal**

Throw rubbish in bins, not in rivers or on the ground, to avoid diseases after floods.

- (iii) **Water Harvesting**

Collect rainwater in tanks or pits to use during drought.

- (iv) **Building Strong Houses**

Use bricks, cement, and iron sheets to resist storms and floods.

(v) **Listening to Weather Reports**

Early warning helps people prepare for floods, storms, or drought.

(vi) **Digging Trenches and Dams**

Trenches guide water away from homes; dams store water for dry seasons.

(vii) **Keeping the Environment Clean**

Boil drinking water, use toilets properly, and spray against mosquitoes after floods.

(viii) **Wise Use of Resources**

Use land, forests, and water carefully without wasting them.

3. Read the story answer the questions that follow:

Story: *The Environment Long Ago and Today*

Long ago, the environment was fresh and green. Rivers flowed with clean water, and forests were full of tall trees and singing birds. People built small houses from clay and grass, and they respected nature. Children played under the shade of trees, and animals roamed freely in the fields.

Today, the environment has changed. Many trees have been cut down, and forests are smaller. Rivers are sometimes dirty because of rubbish and chemicals. Big towns have many cars and factories that produce smoke. People now live in modern houses made of bricks and iron sheets. Children play on playgrounds and roads instead of under trees. Some animals have moved away because their homes were destroyed.

Nambi, a young girl, noticed these changes and told her friends that they must care for the environment so that it can be clean and safe again.

Questions

(a) How was the environment in the past?

Answer: In the past, the environment was clean, with clear rivers and tall trees.

(b) Where did children play long ago?

Answer: Children played under the shade of trees long ago.

(c) How has the environment changed today?

Answer: Today, many trees have been cut down, rivers are sometimes dirty, and towns have smoke from cars and factories.

(d) Where do children play nowadays?

Answer: Children play on roads and playgrounds nowadays.

(e) Why did some animals move away?

Answer: Some animals moved away because their homes in the forests were destroyed.

Teaching Tip: Pupils can draw two pictures — one showing the past environment (trees, clean rivers, animals) and one showing the present environment (smoke, rubbish, few trees). This helps them visualize the comparison.

4. Write five sentences about the picture below:



5. Practice writing the following letters correctly

A	s	o	e	a	v	z	c
B	p	t	n	d	i	u	b
C	k	c	w	m	u	r	z
D	c	b	a	o	d	e	n
E	v	h	e	f	s	x	m
F	a	f	m	t	o	c	g
G	x	o	b	g	z	u	t
H	y	e	n	a	t	h	x

English (non-medium) Competences 3.2

Exercise 3.2.6

Form sentences using the following vocabulary: wind, rain, hungry

Example of sentences

- (i) **Wind** – The **wind** blew the leaves off the tree.
- (ii) **Rain** – The **rain** fell and made the ground wet.
- (iii) **Hungry** – The boy was **hungry** after playing football.

Opposites

Opposite words are pairs that show contrast in meaning.

- (a) **Hot ↔ Cold**
- (b) **Sunny ↔ Rainy**
- (c) **Dry ↔ Wet**
- (d) **Inside ↔ Outside**
- (e) **Happy ↔ Sad**
- (f) **Up ↔ Down**

- (g) **Open ↔ Closed**
- (h) **Old ↔ Young**
- (i) **Slow ↔ Fast**
- (j) **Dark ↔ Light**

Teaching Tip: Pupils can play a “Say the Opposite” game. The teacher says one word (e.g., *hot*), and pupils quickly respond with its opposite (*cold*). This makes learning interactive and fun.

Exercise 3.2.7

1. What is the opposite of *hot*?
Answer: The opposite of hot is cold.
2. What is the opposite of *sunny*?
Answer: The opposite of sunny is rainy.
3. What is the opposite of *dry*?
Answer: The opposite of dry is wet.
4. What is the opposite of *inside*?
Answer: The opposite of inside is outside.
5. What is the opposite of *happy*?
Answer: The opposite of happy is sad.
6. What is the opposite of *open*?
Answer: The opposite of open is closed.
7. What is the opposite of *up*?
Answer: The opposite of up is down.
8. What is the opposite of *old*?
Answer: The opposite of old is young.

Exercise 3.2.7

Form sentences using the following structures

1. What did ... (she/he/you/they) do?
(He/she/you/they) ... (played / walked) in the ... (sand, rain).

Example

What did she do?

She played in the sand

2. When did ... (he/she/they/we/you ... (plant/harvest)?
He/she/they/we/you ... (planted, harvested) in ... (wet/dry) season.
3. Why did ... (you/he/she) cry?
(He/she/I) cried because (he/she/I) was (wet hungry, cold).

Exercise 3.2.8

Read the story and answer the questions that follow

Story: A Village That Cared for Nature

Long ago, the people of Kijani village suffered from floods, droughts, and storms. Their houses were weak, and many trees had been cut down. Rivers overflowed, and children often went hungry when crops were destroyed.

One day, the village elders called a meeting. They decided to plant trees along the riverbanks to stop soil erosion. Families dug trenches to guide water away from homes. They also built stronger houses with bricks and iron sheets. During the rainy season, they harvested rainwater in tanks to use during drought.

The children were taught to throw rubbish in bins and keep the environment clean. The villagers listened to weather reports on the radio so they could prepare early for storms. Slowly, the environment improved. Floods became fewer, crops grew better, and the people lived happily.

Questions

1. What problems did Kijani village face in the past? **Answer:** Kijani village faced floods, droughts, storms, and hunger when crops were destroyed.
2. What did the elders decide to do to protect the environment?
Answer: The elders decided to plant trees, dig trenches, and build stronger houses.
3. How did the villagers prepare for drought?
Answer: The villagers harvested and stored rainwater in tanks to use during drought.

4. Why did the children throw rubbish in bins?

Answer: The children threw rubbish in bins to keep the environment clean and prevent diseases.

5. What was the result of the villagers' actions?

Answer: The environment improved, floods became fewer, crops grew better, and the people lived happily.

Teaching Tip: Pupils can act out this story in a short drama — showing floods, planting trees, digging trenches, and celebrating when the environment becomes safe. This makes the lesson lively and memorable.

Creative Performing Arts 3.2

Exercise 3.2.9

1. Singing/signing simple melody m f s f s l s l t
2. Sing the following songs about the environment

Song 1: Keep Our Environment Clean

(Tune: "Twinkle, Twinkle, Little Star")

Keep the rivers clean and bright,
Plant the trees to give us light.
Do not throw the waste around,
Put it safely in the ground.
Keep the air so fresh and green,
Let's protect our Earth so clean.

Song 2: Trees Are Our Friends

(Tune: "Row, Row, Row Your Boat")

Plant, plant, plant a tree,
Trees are good for you and me.
They give us shade, they give us rain,
Let's plant more trees again!

Song 3: Save Water, Save Life

(Tune: "If You're Happy and You Know It")

If you save water every day, clap your hands,
If you save water every day, clap your hands,
Water helps the crops to grow,
It makes rivers clean and flow,
If you save water every day, clap your hands!

Teaching Tip:

- Pupils can sing these songs in groups, adding claps or simple actions (like pretending to plant trees or scoop water).
- Songs make environmental lessons fun and memorable.

3. Dance a creative dance
4. Weave, e.g. table mat, wall mat, rope, ball, bag, doormat

3.3 Changes in the environment through human activities

Human Activities That Damage the Environment

1. **Constructing Buildings and Roads**
 - Trees are cut down and soil is destroyed.
2. **Grazing Animals**
 - Too many animals eat grass, leaving land bare.
3. **Disposing Waste Poorly**
 - Throwing rubbish in rivers and on land causes pollution.
4. **Cutting Trees**
 - Leads to soil erosion and loss of forests.
5. **Burning Bushes**
 - Kills plants and animals, and pollutes the air.
6. **Farming Carelessly**
 - Poor farming methods reduce soil fertility.
7. **Burning Charcoal**
 - Destroys trees and pollutes the air.
8. **Making Bricks**
 - Leaves holes in the ground and weakens soil.
9. **Burning Bricks**
 - Uses too much firewood, destroying forests.

Exercise 3.3.1

1. What happens when people cut down trees?

Answer: When people cut down trees, the soil is eroded and forests are lost.

2. Why is poor waste disposal dangerous?

Answer: Poor waste disposal is dangerous because it pollutes land and water.

3. What is the effect of burning bushes?

Answer: Burning bushes kills plants and animals and pollutes the air.

4. How does grazing damage the environment?

Answer: Grazing damages the environment because animals eat too much grass, leaving land bare.

5. Why is making bricks harmful to the soil?

Answer: Making bricks is harmful because it leaves holes in the soil and weakens the land.

Teaching Tip: Pupils can make a **two-column chart**:

- Column 1: *Human Activity* (e.g., Cutting trees)
- Column 2: *Effect on Environment* (e.g., Soil erosion)

This helps them clearly see the link between actions and damage.

Ways of Managing Environmental Changes

1. Planting More Trees (Afforestation)

- Trees prevent soil erosion, bring rain, and give shade.

2. Preserving Swamps

- Swamps store water, protect animals, and reduce floods.

3. Avoiding Burning Bushes

- Prevents air pollution and protects plants and animals.

4. Proper Farming Practices

- Use crop rotation, terracing, mulching, and irrigation to keep soil fertile.

5. Covering Gullies with Stones

- Stops soil erosion and protects roads and farms.

6. **Educating People About Dangers of Cutting Trees**

- Helps communities understand why trees are important.

7. **Avoiding Throwing Plastics and Other Non-Rotting Materials**

- Keeps the environment clean and prevents pollution.

Exercise 3.3.2

1. Why should we plant more trees?

Answer: We should plant more trees because they prevent soil erosion and bring rain.

2. How does preserving swamps help the environment?

Answer: Preserving swamps helps by storing water and reducing floods.

3. What is the danger of burning bushes?

Answer: Burning bushes pollutes the air and kills plants and animals.

4. Name one proper farming practice.

Answer: One proper farming practice is crop rotation.

5. Why should we avoid throwing plastics in the environment?

Answer: We should avoid throwing plastics because they do not rot and cause pollution.

Teaching Tip: Pupils can make a **three-column chart**:

- *Problem* (e.g., Soil erosion)
- *Cause* (e.g., Cutting trees)
- *Management* (e.g., Planting more trees)

This helps them clearly connect problems, causes, and solutions.

Mathematics Competences 3.3

Exercise 3.3.3

Add

$$\begin{array}{r} \text{(a)} \quad 1111 \\ + 3543 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(b)} \quad 3131 \\ + 4547 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(c)} \quad 3224 \\ + 5743 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(d)} \quad 6171 \\ + 2513 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(e)} \quad 3124 \\ + 6543 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(f)} \quad 3153 \\ + 1543 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(g)} \quad 4115 \\ + 2543 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(h)} \quad 1416 \\ + 6543 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(i)} \quad 2715 \\ + 6241 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(j)} \quad 2322 \\ + 6443 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(k)} \quad 1312 \\ + 8543 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(l)} \quad 2153 \\ + 7544 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(m)} \quad 1331 \\ + 6543 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(n)} \quad 1322 \\ + 5543 \\ \hline \end{array}$$

$$\begin{array}{r} \text{(o)} \quad 2312 \\ + 6547 \\ \hline \end{array}$$

Measuring Length with Non-Standard Units

Non-standard units are everyday things we use instead of rulers or meters.

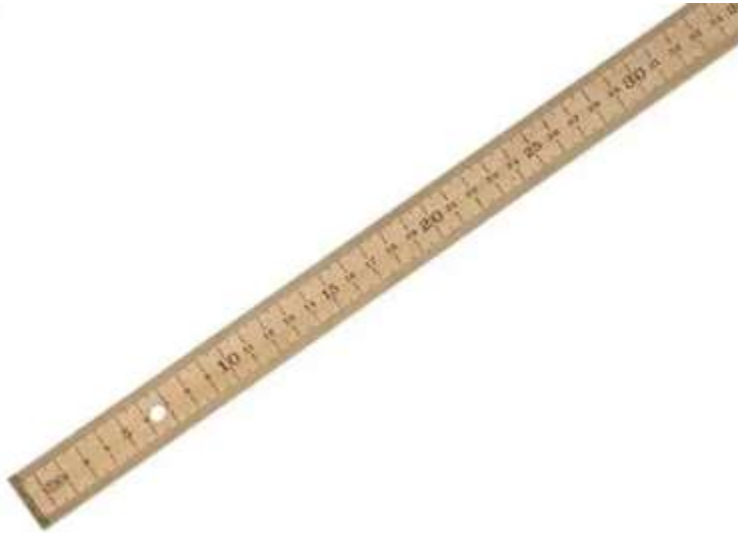
Examples: footsteps, hand spans, sticks, ropes.

Example: Measuring Between Two Trees

- Pupils walk from one tree to another counting their **footsteps**.
- *Example:* The distance between the two trees is **15 footsteps long**.

Meters

- ❖ A **meter** is a standard unit of length.
- ❖ We use a **meter ruler** or a **tape measure** to measure in meters.
- ❖ 1 meter is about the length of a big step.



Meter ruler

Example: Measuring Between Two Trees in meters

Use a tape measure.

Example: The distance between the two trees is **5 meters long**.



Tape measure

Exercise 3.3.4

1. What can we use to measure the distance between two trees in Primary One?

Answer: We can use footsteps to measure the distance between two trees in Primary One.

2. What is the standard unit of length?

Answer: The standard unit of length is the meter.

3. How many footsteps can be equal to 1 meter?

Answer: About one big step can be equal to 1 meter.

4. Which tool is used to measure in meters?

Answer: A meter ruler or tape measure is used to measure in meters.

5. Why do we use standard units like meters?

Answer: We use standard units like meter sto measure accurately.

Teaching Tip:

- Begin with pupils measuring distances using footsteps.
- Then show them a meter ruler or tape measure.
- Let them compare: “15 footsteps $\approx$ 5 meters.” This helps them understand the shift from non-standard to standard units.

Word Problems in meters

Example 1

A boy walks 12 meters to the shop and 8 meters back home. How many meters does he walk altogether?

Solution:

Add the two distances: $12 + 8 = 20$

 Answer: The boy walks **20 meters** altogether.

Example 2

A girl has a rope 15 meters long. She cuts off 6 metros. How many meters remain?

Solution:

Subtract: $15 - 6 = 9$

✓ Answer: The rope left is **9 meters** long.

Example 3

A farmer's garden is 25 meters long and 10 meters wide. What is the total distance around the garden?

Solution:

- Perimeter = $25 + 25 + 10 + 10 = 70$
- ✓ Answer: The distance around the garden is **70 meters**.

Exercise 3.3.4

1. A boy runs 30 meters east and 20 meters west. How many meters does he run in total?
2. A stick is 18 meters long. If 5 meters are cut off, how long is the stick left?
3. A classroom is 12 meters long and 8 meters wide. What is the perimeter of the classroom?
4. A girl walks 10 meters to school and 15 meters back home. How many meters does she walk altogether?
5. A rope is 25 meters long. If 10 meters are used, how many meters remain?

✓ **Answers**

1. $30 + 20 = 50 \rightarrow$ He runs **50 meters**.
2. $18 - 5 = 13 \rightarrow$ The stick left is **13 meters**.
3. $12 + 12 + 8 + 8 = 40 \rightarrow$ The perimeter is **40 meters**.

4. $10 + 15 = 25 \rightarrow$ She walks **25 meters**.
5. $25 - 10 = 15 \rightarrow$ Rope left is **15 meters**.

Teaching Tip: Pupils can act out these problems by walking steps in the school compound and then measuring with a tape. This makes the concept of meters practical and fun.

Estimating Distance in meters

A **meter** is a short distance, about one big step.

We use meters to measure things **nearby**.

Examples

- The distance between two trees in the school compound is about **5 meters**.
- The length of a classroom is about **10 meters**.
- Walking from the teacher's table to the chalkboard is about **3 meters**.

Estimating Distance in Kilometers

A **kilometer (km)** is a long distance.

1 kilometer = 1,000 meters.

We use kilometers to measure **far places**.

Examples

- Walking from the school to the nearby market is about **2 kilometers**.
- The distance from one village to another may be about **5 kilometers**.
- A football match field trip could be about **10 kilometers away**.

Exercise 3.3.5

1. Estimate the distance from your classroom door to the school gate.
2. Is the distance from your home to the nearby shop measured in meters or kilometers?
3. How many meters make 1 kilometer?
4. Estimate the length of your classroom in meters.
5. Estimate the distance from your school to the town in kilometers.

Answers

1. About **50 meters**.
2. It is measured in **kilometers**.
3. **1 kilometer = 1,000 meters**.
4. About **10 meters**.
5. About **3 kilometers**.

Teaching Tip: Take pupils outside. Ask them to walk ten big steps and explain that this is about **10 meters**. Then tell them that walking from school to the next village could be about **1 kilometer**. This makes the difference between meters and kilometers practical and easy to understand.

Literacy Competences 3.3

Exercise 3.3.5

1. Write five human activities that destroy environment.
2. Discuss ways of management of environment.
3. Read poem below and answer the questions that follow

Story: *The Village of Green Hills*

Green Hills was once a beautiful village. Tall trees covered the land, rivers flowed with clean water, and animals lived happily in the forests. Children played under the shade of trees, and farmers harvested plenty of food.

But as time passed, people began cutting down trees to make charcoal and bricks.

Others burned bushes to clear land for farming. Roads and houses were built without care, and rubbish was thrown into rivers. Grazing animals ate too much grass, leaving the land bare. Slowly, the environment changed. The rivers became dirty, the soil lost its strength, and floods and droughts started to affect the village.

One day, the children asked their teacher why the environment was suffering. The teacher explained that human activities like cutting trees, burning bushes, careless farming, and poor waste disposal were destroying nature. The children promised to plant trees, keep the village clean, and tell their parents to protect the environment.

Questions

(a) How was Green Hills village in the past?

Answer: Green Hills village was beautiful, with tall trees, clean rivers, and plenty of food.

(b) What human activities destroyed the environment in the village?

Answer: Cutting trees, burning bushes, making bricks, grazing animals, and throwing rubbish destroyed the environment.

(c) What happened to the rivers and soil after these activities?

Answer: The rivers became dirty and the soil lost its strength.

(d) Who explained the causes of environmental destruction to the children?

Answer: The teacher explained the causes of environmental destruction to the children.

(e) What did the children promise to do?

Answer: The children promised to plant trees, keep the village clean, and tell their parents to protect the environment.

Teaching Tip: Pupils can role-play this story — some acting as villagers cutting trees or burning bushes, others as children planting trees and cleaning the environment. This makes the lesson lively and memorable.

4. Read the poem and answer the questions that follow

Poem: *Caring for Our Environment*

Plant more trees, let them grow,
They bring us rain, and rivers flow.

Preserve the swamps, keep them wide,
Fish and birds will live inside.

Do not burn the bush, my friend,
Protect the land, on us it depends.

Farm with care, rotate the crop,
Mulch and terrace, don't let soil drop.

Cover gullies with stones so strong,
The soil will stay where it belongs.

Teach the people, spread the word,
Cutting trees is bad, we've heard.

Do not throw plastics on the ground,
Keep the earth clean all around.

Teaching Tip:

- Pupils can recite this poem in groups, adding actions like *pretending to plant trees* or *covering gullies with stones*.
- It can also be sung as a chant to make the lesson lively and memorable.

Questions

(a) What should we plant to bring rain and stop soil erosion?

Answer: We should plant more trees to bring rain and stop soil erosion.

(b) Why should swamps be preserved?

Answer: Swamps should be preserved because they store water and protect fish and birds.

- (c) What happens when we burn bushes?
Answer: Burning bushes pollutes the air and kills plants and animals.
- (d) Name one proper farming practice mentioned in the poem.
Answer: One proper farming practice mentioned in the poem is crop rotation.
- (e) How can gullies be managed according to the poem?
Answer: Gullies can be managed by covering them with stones.
- (f) What should people be taught about cutting trees?
Answer: People should be taught that cutting trees is dangerous for the environment.
- (g) Why should we avoid throwing plastics on the ground?
Answer: We should avoid throwing plastics because they do not rot and cause pollution.

Creative Performing Arts 3.3

1. Play a simple percussion instrument correctly.
2. Perform a traditional dance correctly.
3. Make a meter rule.

THEME 4: ENVIRONMENT AND WEATHER IN OUR SUB-COUNTY / DIVISION

Expected learning outcome: The child appreciates and conserves the environment.

4.1 Air and the Sun

Air

Air is the **mixture of gases** that surrounds the Earth and is all around us. It is invisible, but we can feel and observe its effects.

Properties of Air

- (i) **Air has weight** → A balloon filled with air is heavier than an empty one.
- (ii) **Air moves things (force)** → Wind can push leaves, kites, and even roofs.
- (iii) **Air occupies space** → Air fills bottles, balls, and balloons.
- (iv) **Air can be felt** → We feel air when the wind blows on our skin.

Importance of Air

- (i) **For burning** → Fire needs air (oxygen) to burn. Without air, a candle goes out.
- (ii) **For breathing** → People, animals, and plants need air to live.

Dangers of Strong Wind

- (i) Strong wind can blow off roofs.
- (ii) It can break trees and electric poles.
- (iii) It can cause accidents on roads and water.

Exercise 4.1.1

1. What is air?

Answer: Air is a mixture of gases that surrounds the Earth.

2. Mention one property of air.

Answer: Air occupies space.

3. Why is air important for fire?

Answer: Air is important because it helps fire to burn.

4. What do people and animals use air for?

Answer: People and animals use air for breathing.

5. Mention one danger of strong wind.

Answer: Strong wind can blow off roofs.

Teaching Tip: Pupils can do a simple experiment:

- Blow air into a balloon → shows air occupies space and has weight.
- Cover a burning candle with a glass → shows fire needs air to burn.

Air experiments

(i) Show Air Occupies Space

Demonstrate that air fills objects and takes up space.

- Blow air into a balloon and watch it expand
- Compare the balloon before and after blowing
- Explain that air fills the balloon and occupies space

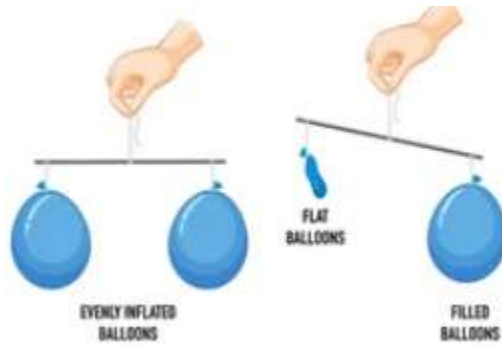
(ii) Test to show that air has weight

Method 1

- Place an empty balloon on a scale, then fill it with air
- Observe the filled balloon is heavier (i.e. air has weight)

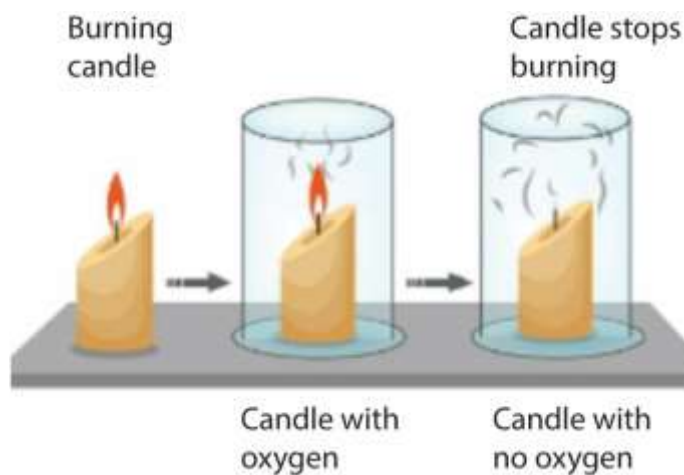
Method 2

- Balance the balloons filled with air on a horizontal beam held by a string
- Pierce one balloon to lose air and the beam loses balance showing that air has weight



(iii) Experiment to show that air (oxygen) is needed for burning

- Light a candle and let it burn
- Cover the candle with a glass jar
- Observe the flame goes out when air is cut off



Key Learning Points

- Air **occupies space** (balloon experiment).
- Air has **weight** and can be **felt** (balloon on scale, waving book).
- Air is needed for **burning** (candle goes out without oxygen).

Teaching Tip: Pupils can perform these experiments in groups, then discuss what they observed. This makes the concept of air practical and memorable.

Importance of the Sun

- (i) **Dries things** → The Sun dries clothes, seeds, and harvested crops.
- (ii) **Gives light and warmth** → The Sun helps us see during the day and keeps the Earth warm.
- (iii) **Helps living things grow** → Plants need sunlight to make food (photosynthesis).

Dangers of the Sun

- (i) **Dries up water** → Lakes, rivers, and ponds can shrink during hot seasons.
- (ii) **Destroys crops** → Too much heat can burn plants and reduce harvest.

Simple Experiment: Why Plants Need Light

Materials:

- Two small plants in pots
- A box or cupboard
- A sunny window

Steps:

1. Place one plant near the sunny window.
2. Place the other plant inside the dark box/cupboard.
3. Water both plants equally.
4. After one week, observe the difference.

Observation:

- The plant near the window grows well and looks green.
- The plant in the dark becomes weak and yellow.

Conclusion: Plants need sunlight to grow strong and healthy.



Grew in light

Grew in dark

Exercise 4.1.2

1. What does the Sun help us to see during the day?

Answer: The Sun gives us light to see during the day.

2. Why do farmers dry seeds in the Sun?

Answer: Farmers dry seeds in the Sun to preserve them for planting.

3. Mention one danger of the Sun.

Answer: The Sun can dry up water in lakes and rivers.

4. What happened to the plant kept in the dark in the experiment?

Answer: The plant in the dark became weak and yellow.

5. Why do plants need sunlight?

Answer: Plants need sunlight to grow and make food.

Teaching Tip: Pupils can sing a short chant: *“Sun gives light, Sun gives heat, Sun helps plants grow food to eat!”*

Mathematics Competences 4.1

Exercise 4.1.3

1. Measure and record shadows at different times of day
2. Count from 3000 to 4000
3. Write numbers from
 - (a) 3099 to 30120
 - (b) 3876 to 3885
 - (c) 3948 to 4000
 - (d) 3533 to 3543
 - (e) 3437 to 3444
4. Find the value of the fourth digit number in each of the numbers below
 - (a) 3099
 - (b) 4876
 - (c) 6948
 - (d) 9533
 - (e) 2437

Number Names for 100s

- ❖ 100 → One hundred
- ❖ 200 → Two hundred
- ❖ 300 → Three hundred
- ❖ 400 → Four hundred
- ❖ 500 → Five hundred
- ❖ 600 → Six hundred
- ❖ 700 → Seven hundred
- ❖ 800 → Eight hundred
- ❖ 900 → Nine hundred

Number Names for 1000s

- ❖ 1000 → One thousand
- ❖ 2000 → Two thousand
- ❖ 3000 → Three thousand
- ❖ 4000 → Four thousand
- ❖ 5000 → Five thousand
- ❖ 6000 → Six thousand
- ❖ 7000 → Seven thousand
- ❖ 8000 → Eight thousand
- ❖ 9000 → Nine thousand
- ❖ 10,000 → Ten thousand

Exercise 4.1.4

1. Write the number name for **400**.
2. Write the number name for **7000**.
3. Write the number name for **900**.
4. Write the number name for **2000**.
5. Write the number name for **10,000**.



Answers

1. 400 → Four hundred
2. 7000 → Seven thousand
3. 900 → Nine hundred
4. 2000 → Two thousand
5. 10,000 → Ten thousand

Teaching Tip: Pupils can chant together: *“One hundred, two hundred, three hundred...”* and *“One thousand, two thousand, three thousand...”* to memorize number names easily.

Literacy Competences 4.1

Exercise 4.1.5

1. Demonstrate that air is needed for burning
2. Write story about the air, and the sun

Weather

Weather is the condition of the atmosphere at a particular time and place.

It can change daily or even hourly.

Elements of Weather

- (i) Sunshine
- (ii) Rain
- (iii) Clouds
- (iv) Wind
- (v) Temperature

Examples

- *Today is sunny.*
- *Yesterday was rainy.*
- *The wind is strong this morning.*

Seasons

Seasons are periods of the year with similar weather conditions.

They last for several months.

Common Seasons

- **Dry Season** → Hot sun, little or no rain.
- **Rainy Season** → Heavy rains, rivers and crops grow.

Exercise 4.1.5

1. What is weather?

Answer: Weather is the condition of the atmosphere at a particular time and place.

2. Mention two elements of weather.

Answer: Sunshine and rain.

3. What is a season?

Answer: A season is a period of the year with similar weather conditions.

4. Which season has heavy rains?

Answer: The rainy season has heavy rains.

5. Which season has little or no rain?

Answer: The dry season has little or no rain.

Teaching Tip: Pupils can draw pictures showing different weather (sunny, rainy, windy) and label them. They can also sing a chant:

Importance of Weather

- (i) **Helps farmers** – Rain makes crops grow, sunshine dries harvests.
- (ii) **Gives water** – Rain fills rivers, lakes, and wells.
- (iii) **Provides light and warmth** – Sunshine helps people see and keeps them warm.
- (iv) **Supports animals and plants** – Weather helps plants grow, which animals eat.
- (v) **Guides daily life** – People plan activities depending on the weather (e.g., wear coats when it's cold, play outside when it's sunny).

Dangers of Weather Changes

- (i) **Floods** – Heavy rain destroys homes, roads, and crops.
- (ii) **Drought** – Lack of rain causes hunger and thirst.
- (iii) **Storms** – Strong winds break houses and trees.

- (iv) **Landslides** – Heavy rain makes soil slide, burying homes and farms.
- (v) **Lightning and thunder** – Lightning can kill people, animals, or burn houses.
- (vi) **Hailstones** – Can injure people, animals, and destroy crops.
- (vii) **Earthquakes** – Shake the ground, destroying buildings and roads.

Exercise 4.1.6

1. Why is rain important to farmers?

Answer: It helps crops to grow.

2. Name two dangers of strong winds.

Answer: They break houses and trees.

3. What happens when there is no rain for a long time?

Answer: Drought causes hunger and thirst.

4. Mention one importance of sunshine.

Answer: It provides light and warmth.

5. Name two dangers of weather changes.

Answer: Floods and lightning.

Teaching Tip: Pupils can draw a chart with two columns: *Importance of Weather* and *Dangers of Weather Changes*. Let them add pictures (sun, rain, storm) to make learning fun and memorable.

Exercise 4.1.7

Read the story and answer the questions that follow:

Story: *A Day in Bright Village*

In Bright Village, children loved to play outside. Every morning, the **air** was fresh, and the **sun** shone brightly. The villagers knew that air was important because it helped them breathe and made fires burn for cooking. The sun gave them light to see, warmth to feel comfortable, and helped their crops grow strong and healthy.

One day, the wind blew strongly. The children saw roofs shaking, trees breaking, and dust flying everywhere. They realized that while air is useful, strong wind can be dangerous. Later, during a very hot season, the sun dried up the river and burned the crops. The villagers understood that too much sun could also cause problems.

From then on, the villagers taught their children:

- **Air is life** because we breathe it, but strong wind can destroy.
- **The sun is a gift** because it gives light and helps plants grow, but too much heat can harm water and crops.

The children learned to respect both air and the sun, using them wisely and protecting themselves from their dangers.

Questions

1. Why is air important for people?

Answer: Air is important because people need it for breathing.

2. Mention one way air is useful in the village.

Answer: Air helps fire to burn for cooking.

3. What danger did the villagers face from air?

Answer: Strong wind blew off roofs and broke trees.

4. Why is the sun important for crops?

Answer: The sun helps crops grow by giving them light and warmth.

5. What danger did the villagers face from the sun?

Answer: The sun dried up water and destroyed crops.

6. What lesson did the children learn about air and the sun?

Answer: They learned that air and the sun are important but can also be dangerous if too strong.

Teaching Tip: You can ask pupils to role-play villagers talking about how they use air and the sun, and how they protect themselves from strong wind or too much heat.

Exercise 4.1.8

Read the poem and answer the questions that follow:

Poem: *The Sun, Our Friend*

The sun wakes us every day,
Shining bright to light our way.

It warms the earth, both near and far,
Guides our work, like a shining star.

It helps the crops to grow so tall,
Brings food and fruits for one and all.
It dries our clothes, it lights our street,
Its golden rays make life complete.

The sun gives hope, the sun gives cheer,
A gift of life we all hold dear.
Without the sun, what would we do?
It keeps our world alive and true.

Questions

1. What does the sun give us every morning?

Answer: The sun gives us light to start the day.

2. How does the sun help farmers?

Answer: It helps crops grow by giving them warmth and light.

3. Mention one way the sun helps at home.

Answer: The sun dries our clothes.

4. Why is the sun called a gift of life?

Answer: Because it gives light, warmth, and helps plants and people live.

Teaching idea: You can let learners recite the poem in groups, then act out scenes—like drying clothes, farming, or walking in sunlight—to make the lesson lively.

English (non-medium) Competences 4.1

Exercise 4.1.9

1. Write one sentence for each of the following vocabulary: air sun, move, wind, dry, wash, heat, warm, blow, break, fall, rain, rise, set, roof, house, clean

Example sentences- let pupils read each loudly and explain the meaning

- (a) **Air** – We breathe **air** to live.
- (b) **Sun** – The **sun** gives us light.
- (c) **Move** – The boy will **move** the chair.
- (d) **Wind** – The **wind** blew the trees.
- (e) **Dry** – The clothes are **dry** after sunshine.
- (f) **Wash** – Mother will **wash** the plates.
- (g) **Heat** – The fire gives out **heat**.
- (h) **Warm** – The blanket keeps us **warm**.
- (i) **Blow** – The girl will **blow** the balloon.
- (j) **Break** – The glass will **break** if it falls.
- (k) **Fall** – The mango will **fall** from the tree.
- (l) **Rain** – The **rain** made the ground wet.
- (m) **Rise** – The sun will **rise** in the morning.

- (n) **Set** – The sun will **set** in the evening.
- (o) **Roof** – The **roof** covers the house.
- (p) **House** – The family lives in a **house**.
- (q) **Clean** – Pupils **clean** the classroom every day.

2. Form questions and answers using the following structures

- (a) What does (Joshua Gloria) do every day?
(Joshua, Gloria) ... (washes, cleans) the (clothes/compound) every day.

He/she ...(washes/cleans) the ... (clothes/compound) every day.

Example

What does Joshua do every day?

Joshua washes clothes every day

He washes clothes every day.

- (b) Every day the (sun/wind) rises/blows.
- (c) Everyday he/she dries (his/her clothes) in the (sun/wind).
- (d) Every day the (wind/rain) (blows/washes) away the ... (leaves/dust).
- (e) Every day (they/we/you) breathe in air

Exercise 4.1.10

Read the story and answer the questions that follow”

Story: A Day of Changing Weather

One morning, the sky was clear and the **sun** shone brightly. Children in the village ran outside to play football because it was **sunny weather**. Birds sang happily in the trees.

By midday, dark **clouds** gathered in the sky. The air became cooler, and people hurried to finish their work outside. Soon, heavy **rain** began to fall. Farmers were glad because the rain watered their crops.

In the evening, the rain stopped, but strong **wind** blew across the village. The trees bent, and leaves flew in the air. Some children held their jackets tightly to keep warm.

At night, the sky cleared again, and the **stars** twinkled brightly. The villagers sat together, talking about how the weather had changed many times in one day.

Questions

1. What type of weather did the children enjoy in the morning?

Answer: They enjoyed sunny weather.

2. What appeared in the sky at midday?

Answer: Dark clouds appeared in the sky.

3. Why were the farmers happy when the rain fell?

Answer: Because the rain watered their crops.

4. What happened in the evening after the rain stopped?

Answer: Strong wind blew across the village.

5. What shone in the sky at night?

Answer: The stars twinkled brightly.

Teaching tip: Pupils can act out the story—pretending to play in the sun, run from rain, feel the wind, and watch the stars. This makes the lesson lively and memorable.

Creative Performing Arts 4.1

1. Singing/signing: Melody (up to 8 notes long without leaps) s s f m r, d r m r d
2. Play musical instruments, e.g. percussion, wind instruments, e.g. flute, pipe
3. Singing/signing the National School Anthem chorus and the first verse

UGANDA NATIONAL ANTHEM



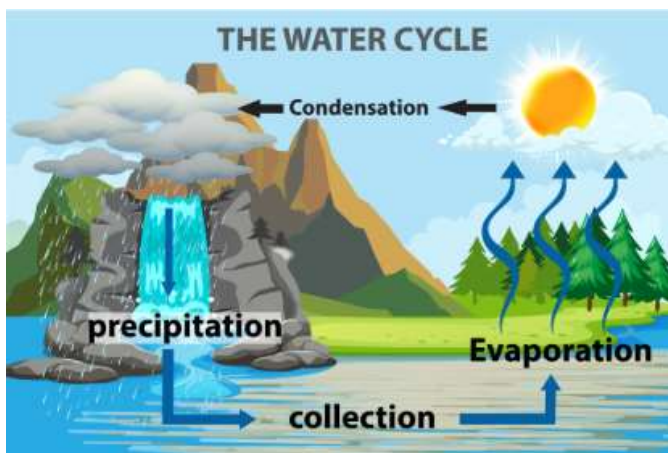
Oh Uganda! may God uphold thee,
We lay our future in thy hand.
United, free,
For liberty
Together we'll always stand.

Oh Uganda! the land of freedom.
Our love and labour we give,
And with neighbours all
At our country's call
In peace and friendship we'll live.

Oh Uganda! the land that feeds us
By sun and fertile soil grown.
For our own dear land,
We'll always stand,
The Pearl of Africa's Crown.

4. Make Pin wheel and Kites

4.2 Water



1. **Evaporation** – Water from rivers, lakes, and oceans changes into vapor due to the Sun’s heat.
2. **Condensation** – Water vapor rises, cools, and forms tiny droplets that gather into clouds.
3. **Cloud Formation** – Droplets combine to make larger drops inside clouds.
4. **Precipitation** – When droplets become heavy, they fall as rain, snow, or hail.
5. **Collection** – Rainwater gathers in rivers, lakes, and oceans, restarting the cycle.

Formation of Rain Drops

- Tiny water droplets in clouds collide and join together.
- When they grow too heavy, gravity pulls them down as rain.

Types of Clouds

Cloud Type	Appearance	Effect
Cumulus	White, fluffy	Fair weather
Cumulonimbus	Tall, dark	Heavy rain & storms
Stratus	Gray, layered	Light rain/drizzle
Cirrus	Thin, wispy	Fair weather, signals change

How Clouds Affect the Environment

- (i) Provide rainfall for farming and drinking water.
- (ii) Influence climate and weather patterns.
- (iii) Support plant and animal life.
- (iv) Affect transport (e.g., fog reduces visibility).

How Clouds Bring Changes in Temperature

- (i) **Thick clouds** block sunlight → cooler temperatures.
- (ii) **Clear skies** allow more sunlight → warmer temperatures.

- (iii) Clouds at night trap heat → warmer nights.
- (iv) **Clear skies** allow more heat → cooler nights
- (v)

Monitoring Weather Change

- (i) Meteorologists use **satellites, radar, and weather stations.**
- (ii) Instruments like **thermometers, barometers, anemometers, and rain gauges** help measure weather elements.

Measuring Rainfall



- **Rain gauge** is the main instrument.
- It collects rainwater in a cylinder.
- The amount is measured in **millimeters (mm)**.
- Example: If the gauge shows 20 mm, it means 20 mm of rain fell.

Exercise 4.2.1

1. What is evaporation?
2. Name two types of clouds that bring rain.
3. How do clouds affect temperature?
4. Which instrument measures rainfall?
5. Why is rainfall important to farmers?

Answers

1. Evaporation is the process where water changes into vapor due to heat.
2. Cumulonimbus and stratus clouds.
3. Thick clouds cool the environment; clear skies make it warmer.
4. Rain gauge.
5. Rainfall provides water for crops.

Importance of Rain

1. On Soil

- Makes soil moist and soft for farming.
- Helps plants grow.
- Recharges underground water.

2. On Animals

- Provides drinking water.
- Creates grass and plants for food.
- Fills rivers and lakes where animals live.

Dangers of Rain

1. On Soil

- Heavy rain causes **soil erosion**.
- Floods wash away fertile soil.

2. On Animals

- Floods drown animals.
- Heavy rain destroys animal shelters.

3. On Plants

- Too much rain causes **waterlogging**, making plants rot.
- Strong storms break branches and uproot trees.

Exercise 4.2.2

1. Why is rain important for soil?
2. How does rain help animals?
3. Name one danger of heavy rain on soil.
4. What happens to plants when there is too much rain?
5. Give two dangers of rain to animals.



Answers

1. Rain is important for soil because it makes it moist and fertile for farming.
2. Rain helps animals by giving them drinking water and food through grass and plants.
3. One danger of heavy rain on soil is soil erosion.
4. When there is too much rain, plants rot or get uprooted.
5. Two dangers of rain to animals are drowning and destruction of their shelters.

Teaching Tip: Take pupils outside after rainfall to observe wet soil, growing grass, and puddles. Let them discuss both the good and bad effects they see.

Mathematics Competences 4.2

Measuring Capacity

- (i) Capacity means how much a container can hold.
- (ii) Example: A jug holds more water than a cup.
- (iii) Pupils can compare by pouring water from one container into another.

Adding in Liters

If a jug has **2 liters** and a bucket has **3 liters**, together they hold: $2 + 3 = 5$ liters.

Subtracting in Liters

If a bucket has **6 liters** and we remove **2 liters**, it remains: $6 - 2 = 4$ liters.

Word Problems

1. A pot holds 5 liters. If you add 3 liters more, how many liters are there?

Answer: 8 liters.

2. A drum has 10 liters. If 4 liters are used, how many liters remain?

Answer: 6 liters.

Simple Rain Gauge Activity

1. Prepare the Bottle

Make a simple rain gauge using a plastic bottle.

- Cut the top off a clear plastic bottle
- Invert the top to act as a funnel
- Tape it securely to the bottle base

2. Mark the Scale

Add measurement marks to record rainfall.

- Use a ruler to mark centimetres or millimetres
- Write numbers clearly on the side
- Start from the bottom of the bottle

3. Place the Gauge

Put the rain gauge outside in an open area.

- Choose a flat surface away from trees/buildings
- Ensure it cannot tip over
- Leave it exposed to rain

4. Measure Daily

Record rainfall each day using non-standard units.

- Check water level every morning
- Measure using cups, spoons, or tins
- Write results in a notebook

5. Observe and Record

Track rainfall for a week.

- Record daily measurements
- Compare which day had more/less rain
- Discuss patterns in class

Exercise 4.2.1

1. What does capacity mean?
2. If a jug has 4 liters and a pot has 2 liters, how many liters in total?
3. A drum has 9 liters. If 3 liters are removed, how many remain?

4. What instrument is used to measure rainfall?
5. Why should a rain gauge be placed in an open area?

Answers

1. Capacity means how much a container can hold.
2. $4 + 2 = 6$ liters.
3. $9 - 3 = 6$ liters.
4. A rain gauge.
5. To collect rain without blockage from trees or roofs.

Teaching Tip: Let pupils bring different containers (cups, tins, bottles) to class. Compare their capacities, then use the rain gauge experiment to connect measurement with real weather observation.

Literacy Competences 4.2

Exercise 4.2.2

1. Name the types of cloud.
2. Draw and label a water cycle
3. Describe the rain cycle
4. Read the story and answer the question that follow

Story: *Rainfall – A Friend and a Challenge*

In the village of Green Valley, children loved to play whenever the rain fell. The drops tapped on the roofs, filled the water tanks, and made the gardens green. Farmers smiled because their crops grew tall and healthy. Animals drank from the streams, and everyone had enough water to cook, wash, and drink. Rainfall was truly a gift.

But sometimes, the rain came too heavily. The river overflowed, washing away houses and roads. Children could not go to school, and farmers lost their crops. At other times, too little rain fell, and the land became dry. Wells emptied, plants withered, and animals grew weak. The people of Green Valley learned that rainfall was both important and dangerous. They decided to plant more trees, build strong houses, and

make channels to guide the water safely. In this way, they could enjoy the blessings of rain while protecting themselves from its dangers.

Questions

- (a) Why were the farmers happy when it rained?
- (b) What happened when the rain was too heavy?
- (c) What problems came when there was too little rain?
- (d) How did the people of Green Valley protect themselves from the dangers of rainfall?
- (e) Mention two importance and two dangers of rainfall.

Suggested Answers

- (a) Farmers were happy because their crops grew tall and healthy.
- (b) The river overflowed, destroying houses, roads, and crops.
- (c) The land became dry, wells emptied, plants withered, and animals grew weak.
- (d) They planted trees, built strong houses, and made channels to guide water safely.
- (e) Importance: provides water, helps crops grow. Dangers: floods destroy homes, drought causes hunger.

5. Read the poem and answer the questions that fall

Poem: *Rainfall's Two Faces*

Rainfall falls, the rivers rise,
It paints the earth with green surprise.
Crops grow tall, the wells are full,
Water brings life, strong and beautiful.

But heavy rains can flood the land,
Destroying houses built by hand.
Roads are blocked, and schools may close,
Danger follows where the water flows.

Too little rain, the land is dry,
Plants will wither, animals cry.
Rainfall helps, but we must care,
To guard our homes and all we share.

Questions

- (a) What good things does rainfall bring to the community?
- (b) What danger happens when rain is too heavy?
- (c) What problem comes when there is too little rain?
- (d) Fill in the blank: *Rainfall falls, the rivers* ____.
- (e) What is the main lesson of the poem?



Suggested Answers

- (a) Rainfall makes crops grow, fills wells, and provides water for life.
- (b) Heavy rain can cause floods that destroy houses, roads, and schools.
- (c) Too little rain causes drought, plants wither, and animals suffer.
- (d) Rainfall falls, the rivers **rise**.
- (e) The lesson is that rainfall is both important and dangerous, so the community must take care.

Teaching tip: Pupils can recite the poem while clapping softly for rhythm. Then, divide them into two groups—one chanting the “importance” verses and the other chanting the “dangers.” This makes the contrast clear and memorable.

English (non-medium) Competences 4.2

Exercise 4.2.3

1. Make one sentence using each of the vocabulary: cloud, hot, cold, warm, wash, soil, grow, food, water, dark, grass, plant, sweater, hat.

Example Sentences – let pupil read the sentences loudly and explain the meanings

- a) **Cloud** – A white cloud floated across the sky.
- b) **Hot** – The tea is too hot to drink.
- c) **Cold** – Ice feels very cold in my hand.
- d) **Warm** – The blanket keeps me warm at night.
- e) **Wash** – Mother will wash the clothes today.
- f) **Soil** – Farmers dig soil to plant seeds.
- g) **Grow** – Flowers grow quickly in the garden.
- h) **Food** – We eat food to stay healthy.

- i) **Water** – Children drink clean water from the tap.
 - j) **Dark** – It is dark outside when the sun sets.
 - k) **Grass** – Cows eat green grass in the field.
 - l) **Plant** – The teacher gave us a plant to care for.
 - m) **Sweater** – I wear a sweater when it is cold.
 - n) **Hat** – The boy wore a hat to cover his head.
2. Form sentences, questions and/or answers using the structure
- (a) (Babies / animals / plants) need ... (food / grass / water) to ... (grow).
Example
Babies need food to grow.
Babies need water to grow.
 - (b) Why is ... (Angela/Moses) wearing a ... (sweater/hat)?
She/he is wearing a (sweater/hat) because it is ... (cold/raining).
 - (c) Why is ... (Monica, Ali) ... (outside / under) the ... (house, tree)?
She / he is ... (inside, outside, under) the ... (home / tree) because it is ... (hot / cold / raining).

Creative Performing Arts 4.2

- 1. Make items out of used materials, e.g. straws, bottle tops, old slippers, bicycle tyres, wires, paper, table mats
- 2. Clapping and tapping rhythms
- 3. Accompanying songs with percussion instruments
- 4. Singing/signing: a simple melody (up to 8 notes long without leaps)
- 5. Listening: telling differences between pitched and non pitched music instruments

4.3 Managing Water

Importance of Water

1. **Supports life** → Humans, animals, and plants need water to survive.
2. **Agriculture** → Irrigation for crops and drinking water for animals.
3. **Domestic use** → Cooking, washing, cleaning, bathing.
4. **Industry** → Cooling machines, making products, cleaning.
5. **Transport** → Rivers, lakes, and seas are used for travel and trade.
6. **Climate regulation** → Oceans and lakes help control weather patterns.

Sources of Water

1. **Rainwater** → Collected directly from rainfall.
2. **Surface water** → Rivers, lakes, ponds, reservoirs.
3. **Groundwater** → Wells, springs, boreholes.
4. **Glaciers and ice** → Melted ice provides freshwater.
5. **Oceans and seas** → Salty water, used after purification.

Water Harvesting

1. **Rainwater harvesting** → Collecting rainwater from rooftops into tanks.
2. **Dams and reservoirs** → Storing water for use in dry seasons.
3. **Ponds and pans** → Small storage for farming and animals.
4. **Underground tanks** → Storing water safely away from evaporation.

Maintenance of Water Sources

1. **Protect rivers and lakes** → Avoid dumping waste.

2. **Plant trees near water bodies** → Prevent soil erosion.
3. **Cover wells and tanks** → Keep water clean.
4. **Avoid overuse** → Use water wisely to prevent drying up.
5. **Community care** → Work together to clean and protect water sources.

Exercise 4.3.1

1. Name three sources of water.
2. Why is water important in agriculture?
3. Mention two methods of harvesting water.
4. Give two ways of maintaining water sources.
5. Why should we protect rivers and lakes?

Answers

1. Rainwater, rivers, wells.
2. It is used for irrigation and animals' survival.
3. Collecting rainwater in tanks, building dams.
4. Planting trees near water bodies, covering wells.
5. To keep water clean and prevent drying up.

Teaching Tip: You can make this lesson practical by asking learners to **draw a simple rainwater harvesting tank** or **role-play a community cleaning a river**.

Mathematics Competences 4.3

Vertical Subtraction of 3-Digit Numbers

Meaning: We write numbers **one below the other in columns** (hundreds, tens, ones) and subtract each column. Since there is **no borrowing**, each digit on top is bigger than the digit below.

Example: Subtract 654 – 321

$\begin{array}{r} 654 \\ - 321 \\ \hline 333 \end{array}$	Step 1: $4 - 1 = 3$
	Step 2: $5 - 2 = 3$
	Step 3: $6 - 3 = 3$

✓ Final Answer: $654 - 321 = 333$

Example 2: Subtract 872 – 460

$\begin{array}{r} 872 \\ - 460 \\ \hline 412 \end{array}$	Step 1: $2 - 0 = 2$
	Step 2: $7 - 6 = 1$
	Step 3: $8 - 4 = 4$

Exercise 4.3.2

1. $743 - 321 = \underline{\quad}$
2. $965 - 432 = \underline{\quad}$
3. $852 - 410 = \underline{\quad}$
4. $700 - 200 = \underline{\quad}$
5. $999 - 111 = \underline{\quad}$

✓ **Answers**

1. 422
2. 533
3. 442
4. 500
5. 888

Literacy Competences 4.3

Exercise 4.3.3

1. Name sources of water.
2. Discuss importance of water sources.
3. List ways of harvesting water
4. Discuss management of water
5. Read the dialogue and answer the questions that follow

Dialogue: *At the Riverbank*

Teacher: Good morning, children! What do you see flowing here?

Bbosa: We see water in the river, teacher.

Teacher: Very good. Why do we need water?

Joan: We need water for drinking, cooking, washing, and farming.

Teacher: Excellent. Can anyone tell me some sources of water?

Norah: Rain, wells, rivers, lakes, and springs.

Teacher: Correct. How can we harvest water when it rains?

Mark: We can collect rainwater from the roof into tanks.

Teacher: Wonderful answer. Now, how do we maintain our water sources?

John: By keeping rivers clean and not throwing rubbish in them.

Joel: By planting trees near water bodies to stop soil erosion.

Teacher: Well done, children. Water is life, so we must protect it always.

Questions

- (a) What were the children looking at in the dialogue?
- (b) Mention two uses of water.
- (c) Name three sources of water.
- (d) How can rainwater be harvested?
- (e) Give two ways of maintaining water sources.

Answers

- (a) The children were looking at water in the river.
- (b) Water is used for drinking and farming.
- (c) Rain, wells, rivers.
- (d) By collecting rainwater from the roof into tanks.
- (e) By keeping rivers clean and planting trees near water bodies.

Teaching Tip: You can role-play this dialogue in class. Let some pupils act as the teacher and others as pupils. This makes the lesson interactive and memorable.

English (non-medium) Competences 4.3

Exercise 4.3.4

1. Write a sentence for each of the vocabulary: tap, well, spring, river, lake, tank, jerrycan, pot, drum, cream, slasher, brush.

Example sentences – let each pupil read the sentences loudly and explain the meaning

- a) **Tap** – The tap gives us clean water.
- b) **Well** – People fetch water from the well.
- c) **Spring** – The spring flows with fresh water.
- d) **River** – The river runs through the village.
- e) **Lake** – Fishermen catch fish in the lake.
- f) **Tank** – Rainwater is stored in the tank.
- g) **Jerrycan** – She carried water in a jerrycan.
- h) **Pot** – Mother cooks food in the pot.
- i) **Drum** – The drum makes a loud sound.
- j) **Cream** – He put cream on the bread.
- k) **Slasher** – Father cut the grass with a slasher.
- l) **Brush** – The boy cleaned his shoes with a brush.

2. Form questions and answers using the following forms

- (a) When did ... (Mary / Musa) clean the ... (well, pot, tank)?
(Musa / Mary).... cleaned the ... (tank, well, pot) on ... (days of the week / time of the day / month of the year).

Example

When did Mary clean the well?

Mary cleaned the well Monday.

- (b) Did ... (Mary / Musa) clean the ... (pot, tank, well).
Yes, she / he did.
No, she / he did not.

- (c) Who washed the ... (jerrycan / pot / tank)? –
... washed ... (jerrycan)

Creative Performing Arts 4.3

1. Singing/signing: simple melody (up to 8 notes long without leaps) e.g: m r d r m d r m f
m r d d
2. Singing/signing songs about managing water

Song: “Water Is Life”

Water is life, let’s keep it clean,
Don’t waste a drop, don’t make it lean.
Harvest the rain, store it in tanks,
Protect our rivers, give them thanks.

Plant the trees, keep soil in place,
Cover the wells, keep a safe space.
Share the water, use it right,
Managing water makes life bright!

Suggested Actions (for signing/gestures)

- “Water is life” → Hands wave like flowing water.
 - “Harvest the rain” → Fingers wiggle down like raindrops.
 - “Plant the trees” → Hands stretch upward like branches.
 - “Share the water” → Pass hands outward as if giving.
3. Playing wind music instruments (orchestra), e.g. flute, trumpet, wind pipe
 4. Dancing with free movements
 5. Making and decorating grass brooms
 6. Modelling things in the environment
 7. Making items of used materials e.g. straws, bottle tops wires, old slippers, bicycle tyres, paper, mats

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