Geography Grade 4

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Chapter 1

Term 1

1.1 Main and Intermediate Directions

1.1.1 GEOGRAPHY
1.1.2 Grade 4
1.1.3 MAP WORK
1.1.4 Module 1
1.1.5 MAIN DIRECTIONS AND INTERMEDIATE DIRECTIONS

Direction
It is important for every person to know in what direction he is moving. Just think of what the pilot of an aeroplane, a seafarer or a hiker in the mountains would do if they could not determine direction. Yes, they would all get lost and end up in the wrong places.

1.1.5.1 Main directions

1.1.5.2 Activity 1

To determine main directions [LO 1.3]

Today we are going to do FIELDWORK outside the classroom. We are going to the school’s sports field as a class, and we are going to decide together where the sun rose today.

Outside (early morning): Stretch both arms sideways. Now everybody turn so that your RIGHT HAND points in the direction where the sun ROSE.

1. What do you think this direction is called?
2. The direction on your LEFT is called WEST.
3. But there are two other important directions to find if you stand like that:
   - The direction IN WHICH you are FACING is NORTH, and the direction BEHIND you is SOUTH.

1.1.5.4 Activity 2

1.1.5.5 To find a place by means of directions [LO 1.4]

1.1.5.6 To the educator

Identify points A/B/C/D on the playground.

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1This content is available online at <http://cnx.org/content/m25377/1.1/>.

Available for free at Connexions <http://cnx.org/content/col11084/1.1/>.
Hide prizes at the end of each group’s treasure hunt. The field must be prepared beforehand. Divide your class into four groups. Each group starts at a point indicated beforehand and searches for their treasure by following the required route.

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Go to point A.</td>
<td>1. Go to point C.</td>
</tr>
<tr>
<td>2. Determine NORTH.</td>
<td>2. Determine NORTH.</td>
</tr>
<tr>
<td>3. Take 14 steps WEST.</td>
<td>3. Take 10 steps NORTH.</td>
</tr>
<tr>
<td>4. Take 2 steps SOUTH.</td>
<td>4. Take 12 steps EAST.</td>
</tr>
<tr>
<td>5. Take 20 steps EAST, and...</td>
<td>5. Take 3 steps NORTH, and...</td>
</tr>
</tbody>
</table>

Table 1.1

<table>
<thead>
<tr>
<th>Group 2</th>
<th>Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Go to point B.</td>
<td>1. Go to point D.</td>
</tr>
<tr>
<td>2. Determine NORTH.</td>
<td>2. Determine NORTH.</td>
</tr>
<tr>
<td>3. Take 3 steps EAST.</td>
<td>3. Take 10 steps NORTH.</td>
</tr>
<tr>
<td>4. Take 10 steps SOUTH.</td>
<td>4. Take 4 steps EAST.</td>
</tr>
<tr>
<td>5. Take 12 steps WEST, and...</td>
<td>5. Take 4 steps WEST.</td>
</tr>
<tr>
<td>6. Take 12 steps NORTH, and...</td>
<td></td>
</tr>
</tbody>
</table>

Table 1.2

But we have a problem!
If you want to travel from Johannesburg to Cape Town, you do not travel either south or west, but somewhere in between the two directions. We call this direction SOUTHWEST.

1.1.5.7 2. Intermediate directions

1.1.5.8 Activity 3

1.1.5.9 To determine intermediate directions [LO 1.4]

Between the four main directions we must therefore identify four additional or intermediate directions:

Now complete the following:
1. Between South and East we have: .................................................................
2. Between North and West we have: .................................................................
3. Between South and West we have: .................................................................

First mentioning North or South and then adding the other direction therefore give the names of the intermediate directions.

1.1.5.10 Activity 4

1.1.5.11 To fill in intermediate directions on a wind rose [LO 1.4]

- Your educator will hand out a sketch of a wind rose on which North, South, West and East are indicated. Fill in all the intermediate directions.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
In what direction will you travel from Johannesburg to Cape Town?

Use your atlas if you are not sure where these cities are situated.
I travel .................................................................

1.1.5.12 Activity 5
1.1.5.13 To determine direction with the help of a wind rose [LO 1.4]

- Let us see if you understand everything. Study the sketch below and then answer the questions that follow:

Figure 1.2
1. Write down the eight main directions about which you have learnt on the wind rose in the sketch.
2. Now indicate in what direction each place lies from the centre:
3. The tannery lies to the ...................... from the centre.
4. The N1 freeway lies to the ...................... from the centre.
5. The water tower lies to the ...................... from the centre.
6. The caravan park lies to the ...................... from the centre.

1.1.6 Assessment

1.1.7 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

1.1.7.1 Assessment Standard

We know this when the learner:
1.3 identifies symbols used in different kinds of maps (including plan view, grids and map keys) [works with sources];
1.4 locates places using a simple grid referencing system and directions [works with sources].

1.1.8 Memorandum

To determine main directions

1. E

To determine intermediate directions

1. SE
2. NW
3. NE

To fill in intermediate directions on a wind rose
• I drive SW.

To determine direction with the help of a wind rose
2. a) NW b) S c) SW d) NE

1.2 True North

1.2.1 GEOGRAPHY

1.2.2 Grade 4

1.2.3 MAP WORK

1.2.4 Module 2

1.2.5 TRUE NORTH

- The north side of a map is called the TRUE NORTH, which points in the same direction as the North Pole. Use your globe to see if you can identify the North Pole.
- Any map should contain an indication of direction. This is done by drawing an arrow on the map pointing north.

\[2\text{This content is available online at } <\text{http://cnx.org/content/m25275/1.1/>}.\]
TN = True North

- Open your atlas at a map of South Africa. Check the direction in which the true north arrow on the map points. Move your desks so that they are all facing north.
- Now your map is ORIENTED – What does this big word mean?
- This merely means that the actual direction is the same as the direction on the map.

1.2.5.1 Activity 1

To find the location of a place on a map [LO 1.4]

Find the location of Johannesburg on the map of South Africa and then answer the following questions:

1. In what direction do the following towns lie from Johannesburg?
   a) Pretoria
   b) Bloemfontein

   Problem:
   Some of you might have trouble finding the places on the map and the teacher cannot help all of you at the same time.
   But there is an easier way!
   Your teacher will hang a WALL MAP against the wall that looks just like yours in the atlas.
   This wall map also contains a true north line. Now your teacher can indicate on the wall map where the places are situated and you can find them on the atlas map more easily.
   Because the wall map hangs against the wall (vertically), North seems to be at the top.
   That is not true.
   Remember how you marked the main directions in the classroom. If you face NORTHWARDS
   - South is BEHIND you;
   - East is to your RIGHT (where the sun rises);
   - West is to the LEFT (where the sun sets).
   ALWAYS use the right names for directions!

1.2.6 Assessment

1.2.7 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

1.2.7.1 Assessment Standard

We know this when the learner:

1.4 locates places using a simple grid referencing system and directions [works with sources].
1.3 The Compass

1.3.1 GEOGRAPHY
1.3.2 Grade 4
1.3.3 MAP WORK
1.3.4 Module 3
1.3.5 THE COMPASS

- The compass is an instrument used to determine direction. A Compass

If your school owns a compass, take it outside to the sports field and try to determine north.

1.3.5.1 Activity 1
1.3.5.2 To do research on the compass [LO 1.1]

Do RESEARCH on the compass as an instrument for determining direction. Write down your information and REPORT what you have found.

Do the following:

1. Visit a library and find at least two books (sources) containing information on the topic. Write down their names.
2. Read the first source and write down the information under SOURCE 1.
3. Now read the second source and write down the additional information that was NOT mentioned in SOURCE 1 under SOURCE 2.

1. Use the information from both sources to write a paragraph or two about the compass.

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3This content is available online at <http://cnx.org/content/m25276/1.1/>.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
1.3.5.3 Activity 2

1.3.5.4 To find answers for questions on directions [LO 1.6]

Here are a few brainteasers! Try to find answers and to come to a conclusion by talking to one another.

1. In which direction do swallows migrate at the beginning of the winter in South Africa? Do you know why?

When working with maps and direction, you should always know where NORTH is.

1.3.6 Assessment

1.3.7 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

1.3.7.1 Assessment Standard

We know this when the learner:

1.1 identifies information from various sources (maps, atlases, books) [finds sources];

1.6 uses information from sources (including own observations) to answer questions about people and places (e.g. ‘Why is it like that?’) [answers the question].
1.3.8 Memorandum

- N – Summer in the Northern Hemisphere

2. Sun

1.4 Symbols and Plans

1.4.1 GEOGRAPHY

1.4.2 Grade 4

1.4.3 MAP WORK

1.4.4 Module 4

1.4.5 SYMBOLS AND PLANS

Symbols and Plans

1.4.6 1. We tell a story with symbols (pictures)

I am Boeboe and I live in 🌺
I 🌸 from the 🌻 of 🌺
I do not like 🍃 because they often try to 🦊 me.

Figure 1.7

1.4.6.1 Activity 1

1.4.6.2 To use symbols [LO 1.3]

Pictures are used instead of words and they tell you something. Now write your own story in which you use picture symbols and words to show that you like playing with your pet.

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4This content is available online at <http://cnx.org/content/m25281/1.1/>.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
1.4.7 2. Symbols as seen from the above

- Objects look different if they are seen from above than when you look at them from the side.
- We use **SYMBOLS** (just like the pictures you did in the previous exercise) to represent objects as they look from *above*.

1.4.7.1 Activity 2

1.4.7.2 To draw the top elevation of an object [LO 1.3]

1.4.7.3 Seen from the side

---

**Figure 1.8**

---

1.4.7.4 Seen from above

---

**Figure 1.9**

---

Draw the following views from above:

<table>
<thead>
<tr>
<th>Item</th>
<th>View</th>
</tr>
</thead>
<tbody>
<tr>
<td>a Tree</td>
<td>a Pencil</td>
</tr>
</tbody>
</table>
1.4.8 Assessment

1.4.9 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

1.4.9.1 Assessment Standard

We know this when the learner:

1.3 identifies symbols used in different kinds of maps (including plan view, grids and map keys) [works with sources].

1.4.10 Memorandum

- N – Summer in the Northern Hemisphere

2. Sun

1.5 Map Symbols*

1.5.1 GEOGRAPHY

1.5.2 Grade 4

1.5.3 MAP WORK

1.5.4 MAP SYMBOLS

1.5.5 Module 5

A large area is usually shown in a small picture on a map. Numbers, letters and pictures are then used to indicate rivers, roads, railway lines, buildings, etc. They are called map symbols. To explain the symbols on a map, a symbol key is used.

1.5.6 1. The plan (map) of my classroom

Tom has drawn a map (plan) of his classroom:

Tom’s classroom

![Tom’s classroom diagram]

Figure 1.10

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*This content is available online at <http://cnx.org/content/m25284/1.1/>.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
The classroom was too big to be drawn on a sheet of paper, and TOM had to REDUCE the classroom. For each step that he took, he used one square on the paper. The tables and other items were also reduced in the same way.

1.5.6.1 Activity 1

1.5.6.2 To draw a plan of the classroom [LO 1.3]

Use the symbol key given and draw a plan of your classroom as you think it will look from the air. You can add to the key if you want to. You can use colour, but work in pencil first to plan it. Use one step for each square. Work on your own.

My classroom

<table>
<thead>
<tr>
<th>Key</th>
</tr>
</thead>
</table>

That looks very nice!

Your educator will now give you a plan of your classroom that he/she has drawn up.

1.5.6.3 Activity 2

1.5.6.4 To compare two plans with one another [LO 1.3]

1. Compare your educator's plan with the one that you drew for your classroom. Check to see where you made mistakes.
2. Measure the length of the classroom in steps. It is steps long.
3. Measure the width of the classroom in steps. It is steps wide.

1. Colour your desk red.
2. Draw the shortest route to the door of the classroom with a red arrow.

1.5.7 2. A plan of the school grounds

- Today we are going to study a bigger plan. We are going to represent the ENTIRE SCHOOL GROUNDS on a plan (map).
- However, we must first do FIELDWORK to gather all the knowledge required.

1.5.7.1 Activity 3

1.5.7.2 To represent the school grounds on a plan [LO 1.4]

Take a piece of paper and a pencil with you to make notes and sketches of everything you see. Look carefully at the following:
1. The location and shape of the school building.
2. The location and shape of other buildings on the school grounds.
3. The location and shape of the sports fields.
4. The location and shape of the playing fields.
5. The location and shape of the flower gardens.
6. The location of the main entrance gate.
7. The names of the streets on all sides of the school grounds.
8. Make sure where the four main directions are located.

1.5.7.3 Back in the classroom

Your educator will now hand out a completed plan of the school grounds:
1. Turn your desks so that you all face NORTH.
2. Study the plan of the school grounds carefully and decide where the four main directions are. Indicate these on the plan.
3. Study the plan of the school grounds carefully and compare it with your notes. Do you agree with the location of the buildings and other objects?
4. Use the key to your plan and colour in the plan accordingly: Example: school buildings – red sports fields - green
5. If you have a problem, your educator can take you outside again to make sure of your facts.
6. Indicate the route from your classroom to the principal’s office with a red arrow.
7. In what direction does the front door of your school face?
8. Write down the names of the various streets around the school in the correct places on the plan.
3. Our immediate surroundings

- This is a street plan of a portion of Cape Town
Figure 1.11
Available for free at Connexions <http://cnx.org/content/col11084/1.1>
1.5.7.4 Activity 4

1.5.7.5 To read a street plan [LO 1.5]

1. Why do we need a street plan of a city?

2. In what direction does building A lie from building C?

3. Use red to indicate the shortest route from point C to point D on the map (take one-way streets into consideration).

4. You are standing on the corner of Loop and Leeuwen Streets. Explain to a tourist how to get from that position to point D.

Your educator will later give you a map just like this one of your own environment. However, today we are first going to do FIELDWORK again in our own environment.

Your educator will now give each of you a map of your immediate environment. Answer the following questions (note the key to the map):

1. Find your school on the street plan and colour it in.

2. Find your own home, or that of someone you know well, on the map. Colour it in with a different colour.

3. Indicate the route that you followed on your fieldwork outing on the map.

4. Which street is south of your school?

5. Indicate on your own map the important buildings and other features that your educator pointed out during the outing.

1.5.8 Assessment

1.5.9 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

1.5.9.1 Assessment Standard

We know this when the learner:

1.3 identifies symbols used in different kinds of maps (including plan view, grids and map keys) [works with sources];

1.4 locates places using a simple grid referencing system and directions [works with sources];

1.5 identifies important political boundaries and key human and physical features on large-scale maps [works with sources].

1.5.10 Memorandum

1. Not to get lost

To find places

To find the shortest routes

1. S

4. 2 blocks east (in Leeuwen)

2 blocks south

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
1.6 A grid network

1.6.1 GEOGRAPHY

1.6.2 Grade 4

1.6.3 MAP WORK

1.6.4 Module 6

1.6.5 A GRID NETWORK

- To indicate the location of a specific place or characteristic is much easier if there is a grid network. These are lines drawn on the map, which divide the map into small squares. At the top of the map, each square is then numbered 1, 2, 3, and so on. In the left and/or right margins, you find the letters A, B, C, etc.

We then use these letters and numbers to give each square a name.

Example:

![Table 1.7](http://cnx.org/content/m25285/1.1/)

If now you want to indicate where the aeroplane is, we say it is in block **B2**.

1.6.5.1 Activity 1

1.6.5.2 To indicate location by means of a grid network [LO 1.3, 1.4]

Indicate the location of the following objects as they appear in the example:

1. man .......................................................... ..........................................................
2. tree .........................................................................................................................
3. dog .........................................................................................................................
4. house .......................................................... ..........................................................

Study this grid:

---

6This content is available online at <http://cnx.org/content/m25285/1.1/>.
Now study the following coded message that has been written according to the grid network code and decipher it. A semi-colon (;) indicates the end of a word.

D4; A5 D4 D5 A1; D4 A2; D1 E5 B5 A1; B4 D3 C1 A2; C1 E1 A1 A3 A1; C5 D3; D2 D3 B2; A5 D4 D5 A1

Now write your own secret message by using the grid network code. Swap your secret message with a classmate and decipher each other's messages.

1.6.6 Assessment

1.6.7 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

1.6.7.1 Assessment Standard

We know this when the learner:

1.3 identifies symbols used in different kinds of maps (including plan view, grids and map keys) [works with sources].
1.4 locates places using a simple grid referencing system and directions [works with sources].
1.6.8 Memorandum

1. C3
2. A3
3. B3
4. B1

1.7 Large scale maps

1.7.1 GEOGRAPHY

1.7.2 Grade 4

1.7.3 MAP WORK

1.7.4 Module 7

1.7.5 LARGE SCALE MAPS

1. The World
   From this picture we can deduct that the earth is round. A round map of the earth is called a globe.

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Figure 1.12

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\(^7\)This content is available online at <http://cnx.org/content/m25286/1.1/>.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>.
Have you ever tried to cut open and flatten a deflated ball? That is why most world maps portray the earth as “flat”.

2. Africa (my continent)

- The continent on which you live, is called .............................................
- Africa is the second largest continent on earth. Africa consists of 49 countries. A country is a large piece of earth within fixed borders. The borders separate one country from the other.

Figure 1.13

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
1.7.5.1 Activity 1

1.7.5.2 To read a map of the world [LO 1.5]

Study the map of the world on the previous page and answer the questions.
1. How many continents are there? ..............................................
2. Which continent is the largest? ..............................................
3. Which continent is the smallest? ...........................................
4. Which ocean is found between Africa and South America? ...........
Which ocean is found between South America and Australia?

1.7.5.3 Activity 2

1.7.5.4 Map work: Africa [LO 1.5]

Colour in all the countries on the African continent beginning with an “N” in brown.
1. Colour your country (South Africa) red.
2. Write down the names of the countries that border on South Africa.
   A country that borders on another country is called a **neighbouring** country.
3. South Africa (My land)

- South Africa lies at the southern tip of the African continent. Like other countries a government that also makes the laws of the country rules South Africa.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
• Look carefully at the map of South Africa.

![Map of South Africa](image)

Figure 1.16

Within the borders of a country there are other borders that divide the country into provinces.

• How many provinces are there in South Africa? 
• Borders are determined by people and can therefore be changed. Until 1994 there were only four provinces.

1.7.5.5 Activity 3

1.7.5.6 To answer questions on map work [LO 1.5]

Look carefully at the map key of South Africa and answer the following questions:
1. Which big mountain range do we find in Kwazulu-Natal?
2. Name three minerals that are mined in the Northern Cape.
3. Which province is the farthest north?
4. Which river on the northern border of the Northern Cape flows into the Atlantic Ocean?
5. In which ocean will you be swimming when holidaying in Durban?
6. Which province is the smallest?
7. In which province are you when you are on a holiday in Port Elizabeth?

1. True / False? The coal mined in Mpumalanga can be exported to other countries by boat

1.7.5.7 Activity 4

1.7.5.8 To use information from sources to answer questions about people and places [LO 1.5]

Your educator will hang a wall map of the world in the classroom. Listen to the world news every day and read newspapers. Bring geography articles to class and let your educator indicate with a pin on the wall map on which continent the events occurred. Discuss them and give your own opinion.

TRY TO CONTINUE WITH THIS ASSIGNMENT UNTIL THE END OF THE YEAR.

1.7.6 Assessment

1.7.7 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.
1.7.7.1 Assessment Standard

We know this when the learner:

1.5 identifies important political boundaries and key human and physical features on large-scale maps [works with sources].

1.7.8 Memorandum

- Africa
  1. 7
  2. Asia
  3. Europe
  4. Atlantic
    - Pacific
  2. Namibia, Botswana, Zimbabwe, Mozambique
    - 9
      1. Drakensberg Mountains
      2. Copper, diamonds, iron
      3. Limpopo
      4. Orange
      5. Indian
      6. Gauteng
      7. Eastern Cape
  8. E – no harbour
Chapter 2

Term 2

2.1 Homes

2.1.1 GEOGRAPHY

2.1.2 Grade 8

2.1.3 THE PLACE WHERE WE LIVE

2.1.4 (SETTLEMENT CHARACTERISTICS)

2.1.5 Module 8

2.1.6 HOMES

Who am I and where do I live?

2.1.6.1 Activity 1

2.1.6.2 To supply information about myself [LO 2.3]

My name is: ..........................................................

Members of my family: ..........................................................

My place in the family (e.g. oldest child): ..................................

I live in (street): ..................................................................

Suburb/Neighbourhood: ..................................................

City/Town: ..........................................................................

How long have I been living at this address?..........................

Where did I live previously? ..........................................

Which of my closest family lives nearby/with us? ..................

2.1.7 1. Homes

People need protection against the weather and elements of nature. We must remain warm and be protected against the sun, wind and rain.

Primitive man lived in tree shelters and caves, but today we build houses to meet our specific needs.

1This content is available online at <http://cnx.org/content/m25301/1.1/>.
People use different kinds of material to build their houses. It is cheaper to use material that is available locally. For that reason we find many wooden houses on the south and east coast of South Africa because of the plantations in those fertile areas.
Mostly people live in houses, but some also live in huts and tents.

2.1.7.1 Activity 2
2.1.7.2 To make a list of materials that are used to build houses [LO 2.1]
Work with your partner and complete the table below by making a list of the materials that are used to build different types of dwellings.

<table>
<thead>
<tr>
<th>HOUSES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>HUTS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>TENTS</td>
<td></td>
</tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.1

2. My home
Everybody’s home is special to them.

2.1.7.3 Activity 3
2.1.7.4 To make a sketch of your home and to give a short description of it
2.1.7.5 [LO 2.1]

2.1.8 Assessment

2.1.9 LEARNING OUTCOME 2: GEOGRAPHICAL KNOWLEDGE AND UNDERSTANDING
The learner will be able to demonstrate geographical and environmental knowledge and understanding.

2.1.9.1 Assessment Standard
We know this when the learner:
2.1 describes the features of the local settlement, including land uses, and compares them with examples from other places;
2.3 describes how basic human needs were met in the past and at present.
2.1.10 Memorandum

2.1.10.1 Who am I and where do I live?

2.1.11 HOUSES

Bricks
  Stone
  Cement
  Grass
  Wood
  Steel
  Sand

2.1.12 HUTS

Stone
  Rope
  Wood
  Branches
  Straw

2.1.13 TENTS

Canvas
  Rope
  Pegs
  Poles

2.2 The establishment of settlements\(^2\)

2.2.1 GEOGRAPHY

2.2.2 Grade 4

2.2.3 THE PLACE WHERE WE LIVE

2.2.4 (SETTLEMENT CHARACTERISTICS)

2.2.5 Module 9

2.2.6 THE ESTABLISHMENT OF SETTLEMENTS

2.2.7 Settlements

2.2.8 1. Reasons for the establishment of a settlement

Since the earliest times people began to live together. Sometimes they did so to protect themselves against the enemy, and then they used natural landforms such as mountains, rivers and the oceans as protection against the enemy.

People often want to know why a town or city was built or established in a particular place. Let us take a look at why Cape Town was established in that particular spot.

\(^2\)This content is available online at <http://cnx.org/content/m25302/1.1/>. 

Available for free at Connexions <http://cnx.org/content/col11084/1.1/>
CHAPTER 2. TERM 2

The protection offered by the bay and the presence of fresh water, played an important part. When Jan van Riebeeck had to choose a spot where to build the first fort close to the deep and safe Table Bay, he decided that it should be built as closely as possible to the river which they later called the Vars River.

Apart from the availability of water (always important) and a bay, there are more reasons why cities or towns come into being.

Safety also plays a role. In earlier times especially, it was important to people to live where they could defend themselves against the enemy. A good example is king Moshesh who lived with his people on top of a mountain called Thaba Bosigo. There they were safe.

Other places where people established themselves in the past was where roads intersected, crossed a river, or went through a ravine.

Many towns were established where mission-stations were founded and churches were erected.

Some people simply settled in places they found attractive. Such places eventually developed into holiday resorts (tourist attractions).

Towns also developed by the seaside because the people had to be able to approach the town by boat (sea-ports). In large parts of South Africa precious minerals such as diamonds, gold and coal had been discovered at an early stage. People moved there in search of jobs and possible riches (mining towns/cities).

A town like Saldanha is renowned for the large amount of fish that is caught, processed and shipped there (industrial towns/cities).

A final reason why new towns and cities develop is the decision of governments to settle people in a particular environment.

2.2.8.1 Activity 1

2.2.8.2 To classify the following towns according to the table [LO1.7, 2.1]

Knysna; Port Elizabeth; Kimberley; Cape Town; Sasolburg; Warmbad / Bela-Bela; Skukuza; Herolds Bay; Hogsback; Koffiefontein

<table>
<thead>
<tr>
<th>Mining town/city</th>
<th>Seaport town/city</th>
<th>Industrial town/city</th>
<th>Tourist attraction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.2

2.2.8.3 Activity 2

2.2.8.4 To find out why your town, city or residential area was established [LO 2.1]

(Ask your teacher, parents or the people at the local museum to assist you, and write a paragraph on the place where you live.)

The following are examples of questions that you can ask. Think of more questions that you can add.
1. How old is our town/city?
2. How did our town/city come into existence?
3. Why did our town or city develop in this particular area?
4. ........................................................................................................................................

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
2.2.8.5 Activity 3

2.2.8.6 To judge your own environment [LO 1.6, 2.1]

Draw or paste pictures that will describe (a) the earlier appearance of your environment, (b) how you want your environment to look like, (c) how it can be improved, and (d) what it should not look like.

a) This is what our environment looked like before people lived there.
b) We would like our town/city to look like this place.
c) Plans we can make to ensure that our descendants will know what the environment looked like before people settled there.
d) This is not the way that our place should look like!

2.2.8.7 2.Type of settlement

A

B

Figure 2.1
Often people live together in large groups and sometimes they live in small groups. In the country a small cluster of houses and shops is called a village. A village is called a rural settlement.

When the cluster becomes larger and the number of businesses increases, it becomes an urban settlement.

2.2.8.8 Activity 4

2.2.8.9 To compare rural and urban settlements [LO 2.1, 2.2, 3.1, 3.2]

Answer the following questions in your groups:

- Do you live in a rural or urban settlement?
- Look at sketch A and sketch B and describe the following:
  - the types of buildings
  - the work that people do
  - what means of transport they use

- What are the advantages of living in a city?
- What are the advantages of living in the country?
- Which services available in the city, are not found generally in the country?
- What problems could people encounter in cities/in the country?
2.2.10 Activity 5

2.2.11 To make suggestions that will solve the above-mentioned problems [LO 3.3]

<table>
<thead>
<tr>
<th>Reduces problems in rural areas</th>
<th>Reduces problems in urban areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

Table 2.3

2.2.9 Assessment

2.2.10 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

2.2.10.1 Assessment Standard

We know this when the learner:

1.6 uses information from sources (including own observations) to answer questions about people and places (e.g. “Why is it like that?”);

- uses geographical and environmental concepts and terms to report on enquiries in different ways (e.g. writing a paragraph, using a poster, artwork).

2.2.11 LEARNING OUTCOME 2: GEOGRAPHICAL KNOWLEDGE AND UNDERSTANDING

The learner will be able to demonstrate geographical and environmental knowledge and understanding.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
2.2.11.1 Assessment Standard

We know this when the learner:

- describes the features of the local settlement, including land uses, and compares them with examples from other places;
- describes the importance of access to resources and services for people living in settlements.

2.2.12 LEARNING OUTCOME 3: EXPLORING ISSUES

The learner will be able to make informed decisions about social and environmental issues and problems.

2.2.12.1 Assessment Standard

We know this when the learner:

3.1 identifies issues associated with resources and services in a particular context;
3.2 identifies the factors that influence why some people have better access to resources compared to others in a particular context;

- suggests ways to improve access to resources in a particular context.

2.2.13 Memorandum

<table>
<thead>
<tr>
<th>Mining town/city</th>
<th>Seaport town/city</th>
<th>Industrial town/city</th>
<th>Tourist attraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kimberley</td>
<td>Knysna</td>
<td>Sasol</td>
<td>Knysna</td>
</tr>
<tr>
<td>Koffiefontein</td>
<td>Port Elizabeth</td>
<td>Kimberley</td>
<td>Port Elizabeth</td>
</tr>
<tr>
<td></td>
<td>Cape Town</td>
<td>Cape Town</td>
<td>Kimberley</td>
</tr>
<tr>
<td></td>
<td>Knysna</td>
<td>Cape Town</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Port Elizabeth</td>
<td>Warmbaths</td>
<td>Skukuza</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Herolds Bay</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hogsback</td>
</tr>
</tbody>
</table>

Table 2.4

- Services
- Facilities
- Peacefulness
- Cheaper/lower crime rate
- Crime/Violence: Far from facilities
- Transport: Smaller variety
- Stress: Cheaper products

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
2.3 Urbanisation and Informal Settlements

2.3.1 GEOGRAPHY

2.3.2 Grade 4

2.3.3 THE PLACE WHERE WE LIVE

2.3.4 (SETTLEMENT CHARACTERISTICS)

2.3.5 Module 10

2.3.6 URBANISATION AND INFORMAL SETTLEMENTS

2.3.7 Urbanisation

- When our grandparents were children (circa 1950), approximately six out of ten people (60%) lived in rural settlements, while the other four (40%) lived mainly in cities. Today the situation has reversed. Approximately 60% of all the people in South Africa live in cities while the other 40% live in rural areas.

![Diagram showing urbanisation]

Figure 2.3

- The migration of people from rural areas to urban areas is called URBANISATION.
- The above-mentioned statistics show that a large number of people have urbanized between 1950 and 2004.

---

This content is available online at [http://cnx.org/content/m25288/1.1/].

Available for free at Connexions [http://cnx.org/content/col11084/1.1]
2.3.7.1 Activity 1

2.3.7.2 To give reasons for urbanisation [LO 2.2]

Supply possible reasons why people move from rural settlements to urban settlements.

2.3.8 Informal settlements

- When large numbers of people move to cities to find jobs or a place to live, it often happens that there are not jobs or a place to settle for everybody. A settlement then becomes overpopulated. (There are more people that can be accommodated.) These people then use various materials to erect a temporary shelter to protect them against cold, rain or danger. Typical examples of the materials used, are cardboard, plastic, wood and sheets of corrugated iron. These areas are called informal settlements.

![Figure 2.4](http://cnx.org/content/col11084/1.1)
People who live in these settlements often incur damages and loss of life as a result of fire.

2.3.8.3 Activity 3

2.3.8.4 To conduct a group discussion during which suggestions are made on how to prevent such disasters [LO 3.2, 3.3]

Discuss in your groups what can be done to prevent such disasters. Make a list of your suggestions.

2.3.9 Assessment

2.3.10 LEARNING OUTCOME 2: GEOGRAPHICAL KNOWLEDGE AND UNDERSTANDING

The learner will be able to demonstrate geographical and environmental knowledge and understanding.

2.3.10.1 Assessment Standard

We know this when the learner:

• describes the importance of access to resources and services for people living in settlements.

2.3.11 LEARNING OUTCOME 3: EXPLORING ISSUES

The learner will be able to make informed decisions about social and environmental issues and problems.

2.3.11.1 Assessment Standard

We know this when the learner:

3.1 identifies issues associated with resources and services in a particular context;
3.2 identifies the factors that influence why some people have better access to resources compared to others in a particular context;

• suggests ways to improve access to resources in a particular context.
2.3.12 Memorandum

2.3.13 Reasons for urbanisation

- Employment
- Facilities/services
- Higher income
- Family

2.4 Land use

2.4.1 GEOGRAPHY

2.4.2 Grade 4

2.4.3 THE PLACE WHERE WE LIVE

2.4.4 (SETTLEMENTS CHARACTERISTICS)

2.4.5 Module 11

2.4.6 LAND USE

Land use

2.4.6.1 Activity 1

2.4.6.2 To identify the different areas in a town/city [LO 1.3, 2.1]

You have discovered by now that your town, suburb, residential area or city is divided into different parts. The area where most of the shops or offices are located, is called the central business core (with businesses, shops and offices). Then there is the industrial area (factories and workshops) and the residential areas (houses and flats). There is a good reason for this division because it would not be acceptable to live next to a factory with all its noise and activities.

What types of buildings do we find in these areas? Fill in the table.

<table>
<thead>
<tr>
<th>Central business core</th>
<th>Industrial area</th>
<th>Residential area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.5

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4This content is available online at <http://cnx.org/content/m25332/1.1/>. Available for free at Connexions <http://cnx.org/content/col11084/1.1>
2.4.6.3 Town planning

People who are responsible for designing towns and cities, are called town planners. Apart from determining where suburbs, industrial areas and the central business core should be situated, they must also see that land is made available for churches, schools, recreational areas, sports fields, streets, parking areas, and services such as railway lines, electricity supply, telephone communication, sewerage, etc. There are many aspects that town planners must keep in mind.

On official town or city maps **land utilization** is indicated in different colours. By means of the various colours, we can determine whether a specific section is used as an area for living or for industrial use.

2.4.6.4 Activity 2

2.4.6.5 To compare urban and rural settlements [LO 1.1, 1.3]

This table indicates which colours should be used for the different areas on a land utilization map. Colour the table in the prescribed colours and then colour in the land utilization map in the correct colours.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Business Sector</td>
<td>(dark blue)</td>
</tr>
<tr>
<td>2</td>
<td>Industrial Area</td>
<td>(purple)</td>
</tr>
<tr>
<td>3</td>
<td>High density occupation</td>
<td>(orange)</td>
</tr>
<tr>
<td></td>
<td>Single occupation</td>
<td>(yellow)</td>
</tr>
<tr>
<td>5</td>
<td>Sports and recreation</td>
<td>(dark green)</td>
</tr>
<tr>
<td>6</td>
<td>Public open space</td>
<td>(light green)</td>
</tr>
<tr>
<td>7</td>
<td>Agricultural land</td>
<td>(dark green outline)</td>
</tr>
<tr>
<td>8</td>
<td>Schools</td>
<td>(grey)</td>
</tr>
<tr>
<td>9</td>
<td>Churches</td>
<td>(grey // 45° black shading)</td>
</tr>
</tbody>
</table>

Table 2.6

**Land Use Map**

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
Explanation: To help you to identify land utilization, numbers are used. All the plots without numbers are for general occupancy (residential areas).

2.4.6.6 Activity 3

2.4.6.7 To complete a land utilization map of your own environment [LO 1.1, 1.3]

Make a copy of a street plan of your town or suburb, e.g. the area where your school or home is located. Use only a section of the map. Use the same colours as for the previous activity and complete the land utilization map.

Go for a walk through your town, or try to do it the way you remember it, or from your discussion as a group.

After you have completed your map, you can compare it with a friend's map.
2.4.6.8 Activity 4

2.4.6.9 To make suggestions of how to improve land utilization [LO 1.7, 2.2, 2.3]

- In many towns and suburbs there is land that has not been utilized properly. It could be a riverbank that has not been developed as a proper recreational facility, or simply not cared for and therefore it is not an attractive nature spot.

- Identify a neglected piece of land in your environment. Discuss as a group how it could be transformed into a recreational area or a nature reserve. Make a sketch to explain your proposal to your partners. Use the correct colours (look at activity 1 again) to colour in your plan to improve the area, as well as the surrounding area.

Compile the rules that will make it pleasant for people who visit the area.

2.4.6.10 Our rules

1. ........................................................................................................................................
2. ........................................................................................................................................
3. ........................................................................................................................................
4. ........................................................................................................................................
5. ........................................................................................................................................
6. ........................................................................................................................................
7. ........................................................................................................................................
8. ........................................................................................................................................
9. ........................................................................................................................................
10. .........................................................................................................................................

2.4.7 Assessment

2.4.8 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

Assessment Standard
We know this when the learner:
1.1 identifies information from various sources (maps, atlases, books);
1.3 identifies symbols used in different kinds of maps (including plan view, grids and map keys) [works with sources];
1.7 uses geographical and environmental concepts and terms to report on enquiries in different ways (e.g. writing a paragraph, using a poster, artwork).
CHAPTER 2. TERM 2

2.4.9 LEARNING OUTCOME 2: GEOGRAPHICAL KNOWLEDGE AND UNDERSTANDING

The learner will be able to demonstrate geographical and environmental knowledge and understanding.

2.4.9.1 Assessment Standard

We know this when the learner:

- describes the features of the local settlement, including land uses, and compares them with examples from other places;
- describes the importance of access to resources and services for people living in settlements;

2.3 describes how basic human needs were met in the past and at present.

2.4.10 Memorandum

Land use

The different areas in a town/city

<table>
<thead>
<tr>
<th>Central business core</th>
<th>Industrial area</th>
<th>Residential area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large office complexes</td>
<td>Large factories</td>
<td>Flats</td>
</tr>
<tr>
<td>Shopping centres</td>
<td>Smaller storage places</td>
<td>Houses</td>
</tr>
<tr>
<td>Businesses</td>
<td>Workshops</td>
<td>Townhouses</td>
</tr>
<tr>
<td></td>
<td>Storage places</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.7

2.5 Transport

2.5.1 GEOGRAPHY

2.5.2 Grade 4

2.5.3 THE PLACE WHERE WE LIVE

2.5.4 (SETTLEMENT CHARACTERISTICS)

2.5.5 Module 12

2.5.6 TRANSPORT

2.5.7 Transport

Types of transport

Transport is needed to move people and goods from one place to the other. Our parents must get to their work and we must get to school. Fresh bread and milk must be delivered daily to the café/superette. Postal items must be transported worldwide everyday.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
2.5.7.1 Activity 1

2.5.7.2 To compile a list of different kinds of transport [LO 2.2, 3.2]

Compile a list of all the means of transport that you can think of, and indicate those that you make use of.

Kinds of Transport

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 

Compare your list to that of your partner and extend your list with his/her examples.

2.5.8 Activity 2

2.5.8.1 How do you get to school in the morning??

<table>
<thead>
<tr>
<th>Name of learner</th>
<th>With my parents’ car</th>
<th>With a friend’s parents’ car</th>
<th>With a bus</th>
<th>With a taxi</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<td></td>
<td></td>
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<tr>
<td>2.</td>
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<tr>
<td>3.</td>
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<td>9.</td>
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<tr>
<td>10.</td>
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</tbody>
</table>

Table 2.8

Table 2.9
2.5.8.3 Activity 3

2.5.8.4 To compile a graph [LO 1.7]

Compile a graph by using the above totals.

![Figure 2.6]

2.5.9 2. Roads

To move people and goods successfully from one point to another, an extensive road network is needed. For busy routes roads should preferably have two or even three lanes, while single lane roads are suitable for light traffic in residential areas. Roads must be well maintained.

2.5.9.1 Activity 4

2.5.9.2 To answer questions about a road in your town [LO 2.1]

Identify one road in your town/city and answer the following questions about the road:

- How wide and how long is the road?
- Are there road markings on the road?
- Which places does the road connect?
- What type of road is it (national, regional, local)?
- Who uses the road?
- What is the name of the road?

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
Mainly what kinds of vehicles use the road?

Who is responsible for the maintenance of this road?

2.5.9.3 Activity 5

2.5.9.4 To draw your own road map [LO 1.5]

Identify an area around the road you identified in the previous activity and draw a simple road map of the area. Remember to include the names of streets and other important landmarks.

2.5.10 Assessment

2.5.11 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

2.5.11.1 Assessment Standard

We know this when the learner:

1.2 organises information under given headings;
1.6 uses information from sources (including own observations) to answer questions about people and places (e.g. “Why is it like that?”).

2.5.12 LEARNING OUTCOME 2: GEOGRAPHICAL KNOWLEDGE AND UNDERSTANDING

The learner will be able to demonstrate geographical and environmental knowledge and understanding.

2.5.12.1 Assessment Standard

We know this when the learner:

- describes the features of the local settlement, including land uses, and compares them with examples from other places;
- describes the importance of access to resources and services for people living in settlements.

2.5.13 LEARNING OUTCOME 3: EXPLORING ISSUES

The learner will be able to make informed decisions about social and environmental issues and problems.

2.5.13.1 Assessment Standard

We know this when the learner:

3.2 identifies the factors that influence why some people have better access to resources compared to others in a particular context.
3.1 What are resources?

GEOGRAPHY
Grade 4
RESOURCES AND SERVICES WITHIN A SETTLEMENT
Module 13
WHAT ARE RESOURCES?
Resources
Definition: Resources are things we need to do/make things.
Are the following all resources? Look at the definition again and first discuss the possible answers with a friend.

<table>
<thead>
<tr>
<th>copper</th>
<th>fish</th>
</tr>
</thead>
<tbody>
<tr>
<td>oil</td>
<td>wood</td>
</tr>
<tr>
<td>water</td>
<td>the son</td>
</tr>
<tr>
<td>wind</td>
<td>sand</td>
</tr>
<tr>
<td>lime</td>
<td>aluminium</td>
</tr>
<tr>
<td>coal</td>
<td>ground</td>
</tr>
<tr>
<td>cattle manure</td>
<td>gold</td>
</tr>
<tr>
<td>gas</td>
<td>iron</td>
</tr>
</tbody>
</table>

Table 3.1

Another resource: People
What can happen without the manager and the worker? Nothing!
Remember: because people are an important resource, they must be well looked after, but nature provides the other resources – they must also be well looked after. More about this later!

Result of test:
Perhaps you and your friend had a nice argument about what resources are. The one who did the best is the one who said that all sixteen are resources.

Activity 1
To identify resources in our daily lives [LO 2.1]

1This content is available online at <http://cnx.org/content/m29344/1.1/>.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
Think a bit and add some more to each group (your educator will help you):
Resources that help us to produce food:
soil, phosphates (for making fertiliser), water, manure

Resources that help us to warm ourselves and cook food:
coal, wood, oil, gas

Resources that help us to produce equipment for the home:
wood, metals, coal, oil

Resources that help us to produce equipment for the classroom:
coal, wood, metals

Very important:
Think carefully about all the resources mentioned – also those you added – and write down the resources that cannot be exhausted. You will learn more about it in Grade 5.

There are so many poor people in South Africa and in the rest of Africa who dry cattle manure in cakes to make a fire that it can also be named as a source of energy.

Map work
Activity 2
To study the map of South Africa and to answer the questions [LO 1.1]
Natural resources in South Africa
Which mines are found in Gauteng? .....................................................
Which mines do we find in the North Cape? .................................
What type of farming is found in the Free State? .............................
Which animal resources are found in your province? ........................
In which province do we find hardly any farming? (Try to give a reason for your answer.) ..............................................................
Assessment
LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY
The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.
Assessment Standard
We know this when the learner:
1.1 identifies information from various sources (maps, atlases, books).

LEARNING OUTCOME 2: GEOGRAPHICAL KNOWLEDGE AND UNDERSTANDING
The learner will be able to demonstrate geographical and environmental knowledge and understanding.
Assessment Standard
We know this when the learner:
- describes the features of the local settlement, including land uses, and compares them with examples from other places.

Memorandum
Resources in our daily lives
- Sun
- Seed
- Lime
- Sun
- Paraffin
- Animal hides
- Glass

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
Rubber
Very important:
Sun
Soil
Water (if we look after it)
The map of South Africa
Gold
Diamonds
Sheep, cattle, maize, wheat, sunflowers
Northern Cape - dry

3.2 Water in our houses

3.2.1 GEOGRAPHY

3.2.2 Grade 4

3.2.3 RESOURCES AND SERVICES WITHIN A SETTLEMENT

3.2.4 Module 14

3.2.5 WATER IN OUR HOUSES

3.2.6 Water as a resource

Without water life on earth is not possible. Water is also the ingredient or substance found in the largest quantities on earth – it covers almost 80% of the surface of our planet. Only 3% of the 80% is fresh water, and most of this fresh water is found in frozen form, namely the ice-fields at the North and South Poles.

3.2.6.1 Some interesting facts:

- Between 60% and 70% of our bodies consist of water.
- 85% of our brains is water.
- 25% of our bone structures is water.
- 83% of our blood is water.
- A human being can survive for longer than two weeks without food, but only three days without water.
- A human being loses an average of 2.5 litres of water due to perspiration, respiration and waste.

3.2.7 1.Water in our houses

Now that you have been introduced to these interesting facts about human beings and water, are you convinced that water is the most important resource? Discuss it in class.

3.2.7.1 Activity 1

3.2.7.2 To discuss water in and around our homes [LO 2.2]

What does your family need water for? Talk to your partner about your needs, and then answer the following questions:

---

This content is available online at <http://cnx.org/content/m25335/1.1/>.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
3.2.7.3 Water for our family

1. We all drink water.

2. Mother uses water when she cooks food.

3. ...

4. ...

5. ...

6. ...

7. ...

8. ...

3.2.8 Where does your water come from?

Figure 3.2

When it rains, water flows along rivers and streams to eventually end up in great dams that were built in the rivers. They are called storage dams. From these storage dams the water is transported in enormous pipes to water works where the necessary purification of the water takes place. From there the water is transported along smaller pipes to cities and towns and eventually to our homes. Which storage dam(s) is/are nearest to you? Write down the name(s) of the dam(s):
3.2.9 Access to water

3.2.9.1 Activity 2

3.2.9.2 To identify the reasons why some people have better access to clean water than others [LO 3.2]

- Our government spends large amounts of money to supply clean water to all the people of our country for drinking household use. The ideal is that each household should have running water that is clean and safe in their homes.
- However, there are still many people that have to walk long distances to fetch water in containers and carry them home. Often the water is taken from rivers that are polluted by people, animals and factories. The polluted water causes diseases from which people can die.

Informal settlements are established and develop so rapidly that the local governments cannot supply running water immediately. The people build their shelters close to open water sources such as rivers. Everybody then uses the same source. People not only take their drinking water from the source, but also wash themselves and their washing in the same water. Children play and swim in the water, and animals contaminate the water. Often waste from factories is dumped into the source.

---

Figure 3.3

---

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
3.2.10 Assessment

3.2.11 LEARNING OUTCOME 2: GEOGRAPHICAL KNOWLEDGE AND UNDERSTANDING
The learner will be able to demonstrate geographical and environmental knowledge and understanding.

3.2.11.1 Assessment Standard
We know this when the learner:

- describes the importance of access to resources and services for people living in settlements.

3.2.12 LEARNING OUTCOME 3: EXPLORING ISSUES
The learner will be able to make informed decisions about social and environmental issues and problems.

3.2.12.1 Assessment Standard
We know this when the learner:

- identifies the factors that influence why some people have better access to resources compared to others in a particular context.

3.2.13 Memorandum

3.2.14 Water in and around our homes

1. Purification (cleansing purposes)
2. Garden
5. Swimming pool

3.3 Water supply and water conservation

3.3.1 GEOGRAPHY

3.3.2 Grade 4

3.3.3 RESOURCES AND SERVICES WITHIN A SETTLEMENT

3.3.4 Module 15

3.3.5 WATER SUPPLY AND WATER CONSERVATION

3.3.6 Water as a resource

3.3.6.1 Limited supply of water

Water – the smaller the supply of water, the bigger the problem!

To supply water to a city is not an easy task. The location of the first fort at the Cape was determined by the Vars River, because the building had to be erected where water was available. The river (that presently flows beneath Adderley Street in a pipe) is literally “a drop in the ocean” of what the Cape Metropole

---

3This content is available online at <http://cnx.org/content/m25339/1.1/>. Available for free at Connexions <http://cnx.org/content/col11084/1.1/>
presently needs. The water for this vast urban area comes from a number of dams in the mountainous regions many kilometres from Cape Town.

To be sure that water will always be available demands thorough planning – sometimes years ahead! A rapid influx of people will result in the fact that for a certain period there will not be sufficient water for urban use. This is a serious situation because human beings cannot survive without water.

3.3.6.2 Access to water

Do all South Africans have access to water daily?

3.3.6.3 Activity 1

3.3.6.4 To discuss this statement in your groups and propose ways to address the problems [LO 3.2, 3.3]

3.3.6.5 Polluted water

3.3.6.6 Activity 2

3.3.6.7 To study the sketch and make a list of how people pollute fresh water daily [LO 3.1]

Figure 3.4

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
Yes, even the wrappers of sweets that are carelessly discarded by people in the street, might eventually end up in a dam along with the rainwater, and therefore pollute our drinking water. We already know that only 3% of all water is suitable for drinking, and every time a part of that water is polluted, it must first be purified before we can drink it.

Figure 3.5

5. Water conservation

3.3.6.8 Activity 3

3.3.6.9 To make suggestions how to save water [LO 3.3]

• What percentage of the water on earth is fresh water and suitable for use by us? (Refer to the first page in module 14).

..............%.

• It should therefore be clear to you that we must use the water supply sparingly.

Group work:
‘Every drop is precious” is a well-known saying we often see on large posters. The aim is to encourage people to save water.

Suppose your group is the local government and you want to encourage the people of your town or city to save water. Think up a clever slogan to influence the people.

Work on your own. Think carefully and write down at least FIVE ways how to save water. Then discuss it with your partner and select the five best ideas from your contributions. Circle the numbers of your choices. Afterwards you will have the opportunity to read them to the class.

This is how we save water
1.  ...................................................................................................................
2.  ...................................................................................................................
3. ...................................................................................................................
4. ...................................................................................................................
5. ...................................................................................................................

3.3.7 Assessment

3.3.8 LEARNING OUTCOME 3: EXPLORING ISSUES

The learner will be able to make informed decisions about social and environmental issues and problems.
3.3.8.1 Assessment Standard

We know this when the learner:

3.1 identifies issues associated with resources and services in a particular context;
3.2 identifies the factors that influence why some people have better access to resources compared to others in a particular context;

• suggests ways to improve access to resources in a particular context.

3.3.9 Memorandum

• Water for washing Chemicals
• Diesel Sewerage
• Rubbish Human waste

• 3%

3.4 What is meant by services?4

3.4.1 GEOGRAPHY
3.4.2 Grade 4
3.4.3 RESOURCES AND SERVICES WITHIN A SETTLEMENT
3.4.4 Module 16
3.4.5 WHAT IS MEANT BY SERVICES?

Services

Services have to be rendered to the hundreds of thousands of people who live in your town, suburb or city. In the previous learning unit you read that planning is necessary for these services. In this learning unit you are going to learn a little more about certain services.

4This content is available online at <http://cnx.org/content/m25345/1.1/>.
3.4.5.1 Activity 1

3.4.5.2 To identify the services that are rendered in your town/city [LO 2.1, 2.3]

3.4.5.3 Here is a list of services that must be available to inhabitants of a city or a very large town. Mark those services that are rendered in your town or city.

<table>
<thead>
<tr>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
</tr>
<tr>
<td>Library</td>
</tr>
<tr>
<td>Fire Department</td>
</tr>
<tr>
<td>Trade</td>
</tr>
<tr>
<td>Public Parking</td>
</tr>
<tr>
<td>Public Transport</td>
</tr>
<tr>
<td>Education</td>
</tr>
<tr>
<td>Parks and Recreational Areas</td>
</tr>
<tr>
<td>Police</td>
</tr>
<tr>
<td>Postal Services</td>
</tr>
<tr>
<td>Sewerage</td>
</tr>
<tr>
<td>Security Services</td>
</tr>
<tr>
<td>Sports Fields</td>
</tr>
<tr>
<td>City Police</td>
</tr>
<tr>
<td>Telecommunication Services</td>
</tr>
<tr>
<td>Traffic Services</td>
</tr>
<tr>
<td>Waste Removal</td>
</tr>
<tr>
<td>Water Provision</td>
</tr>
</tbody>
</table>

Table 3.2

3.4.5.4 Are there services that a large city can do without?

Have a class or group discussion on the services (see Activity 1) that are normally rendered to communities. Write down THREE of these that are unnecessary as far as you are concerned.

1. .......................................................... ..........................................................
2. .......................................................... ..........................................................
3. .......................................................... ..........................................................

3.4.6 Assessment

3.4.7 LEARNING OUTCOME 2: GEOGRAPHICAL KNOWLEDGE AND UNDERSTANDING

The learner will be able to demonstrate geographical and environmental knowledge and understanding.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
3.4.7.1 Assessment Standard

We know this when the learner:

2.1 describes the features of the local settlement, including land uses, and compares them with examples from other places;

• describes how basic human needs were met in the past and at present.

3.4.8 Memorandum

• Opportunity to get a qualification
• Cheaper (more affordable)

3.5 Educational, Trade and Transport Services

3.5.1 GEOGRAPHY

3.5.2 Grade 4

3.5.3 RESOURCES AND SERVICES WITHIN A SETTLEMENT

3.5.4 Module 17

3.5.5 EDUCATIONAL, TRADE AND TRANSPORT SERVICES

3.5.5.1 Educational services

3.5.5.1.1 Play School

3.5.5.1.2 Nursery School

3.5.5.1.3 Primary School

3.5.5.1.4 High School

3.5.5.1.5 Technical college

3.5.5.1.6 Technikon

3.5.5.1.7 University

Write down the name of your own school in the space provided below, and the names of other places in your town or city where educational services are rendered. You will see that the larger the town / city, the longer the list will be.

...........................................................................................................................................
...........................................................................................................................................
...........................................................................................................................................
...........................................................................................................................................
...........................................................................................................................................
...........................................................................................................................................
...........................................................................................................................................

5This content is available online at <http://cnx.org/content/m26431/1.1/>.
3.5.5.2 Activity 1

3.5.5.3 To determine whether educational facilities are within easy range [LO 1.7, 2.1]

If there isn’t a university, school, technikon, technical college or high school in your town or city, you must try to find out which of these educational facilities are closest to you, and then fill in the information in the space below.

Our town, city or suburb:
The closest to us:

<table>
<thead>
<tr>
<th>Educational services</th>
<th>Name</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical College:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.3

<table>
<thead>
<tr>
<th>Technikon:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>University:</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.4

What advantage does it hold for young people if they live near a place where they can continue their studies?

3.5.5.4 2. Trade services

3.5.5.5 Activity 2

3.5.5.6 To be aware of services rendered by people or authorities [LO 2.2, 2.3, 3.2]

You have already discovered that the larger the place (city or town), the greater the chance that there will be many different kinds of educational services available to the community. The same applies to trade services – the larger the town or city, the more and the better the available services.

The sentences below are all related to trade services and where they are rendered. Read each sentence carefully, make sure that you understand it, and then discuss it with your classmates. Mark whether the statement is true or false.

<table>
<thead>
<tr>
<th>T</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. People will often travel from a smaller town to a larger one to do their shopping there.</td>
<td></td>
</tr>
</tbody>
</table>

continued on next page
2. If a farmer wants to sell 25 tons of potatoes in one go it will be best for him to take it to a market in the city.

3. A jeweller who sells only diamond rings should rather open his jewellery shop in a big city.

4. The use of computers is the reason why there are fewer and fewer banks in small towns.

5. Today, in the smallest towns, one finds CD shops that sell only CDs with classical and opera music.

6. More people visit a flea market in small towns than in cities.

**Table 3.5**

In cities and large towns there are many people who buy products and make use of services. We say there is a big market. We know that the greater the market, the less expensive the product can be.

You will understand that you would rather make a profit of R2,00 on ten articles (R20,00 profit) than R4,00 on each article of which you sell only two (R8,00 profit)!

But when one speaks of trade services, one does not necessarily mean that only products or articles are sold. Many people sell their services, for example lawyers and advocates, accountants, travel agents, people who invest other people’s money, and so on. These kinds of services are more readily available in larger centres than in small towns.

List a few people or firms that you know who render (trade) services, but do not sell products.

<table>
<thead>
<tr>
<th>Name</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3.6**

3.5.5.7 3. Transport services

3.5.5.8 Activity 3

3.5.5.9 To investigate the value of transport services and roads [LO 1.2, 2.2]

You are aware that in your community people depend on transport. Think of the various ways in which learners all over the country are transported to their schools by car, taxi, bus, train or bicycle.

With your partner, try to classify these five means of transportation as public or private transport. Mark them with an X in the appropriate column.
Table 3.7

<table>
<thead>
<tr>
<th>Public transport</th>
<th>Private transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorcar</td>
<td></td>
</tr>
<tr>
<td>Taxi</td>
<td></td>
</tr>
<tr>
<td>Bus</td>
<td></td>
</tr>
<tr>
<td>Train</td>
<td></td>
</tr>
<tr>
<td>Bicycle</td>
<td></td>
</tr>
</tbody>
</table>

Often minibus taxis are the only means of transport. In larger towns and cities, however, people have a choice between various means of public transport. The larger the city, the wider the choice of public transport.

On the other hand, not only people have to be transported! What about . . . Wait, you can complete the following on your own:

Name five products of each of the following industries that have to be transported:

Table 3.8

<table>
<thead>
<tr>
<th>Building industry</th>
<th>Garage with petrol station</th>
<th>Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Think of all the different types of cargo transport lorries that have to transport the products you have identified!

3.5.5.10 Transport makes life easier

Transport has indeed made life easier, and has also allowed people the opportunity to explore the world around them. It seems as if things are becoming easier all the time! However, we are now going to investigate whether everything is really so easy. Do things actually run as smoothly as it seems?

Divide the class into four groups in order to look into transport in the following circumstances: (a) transport for a physically disabled person, (b) transport in a minibus taxi, (c) transporting petrol or gas (dangerous substances), and (d) transporting injured patients in an ambulance.

Each group is given a topic. At least six questions must be put to someone with first-hand knowledge of the matter. The first two questions for each topic are given, but you must think of the remaining ones. Use the answers to write a short report, which you must present to the class.

3.5.5.11 How does a disabled person experience the available forms of transport?

Do all able people understand your problem?

Is it possible for you to make use of public transport?

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
3.5.5.12 Transport in a minibus taxi

Which people make use of minibus taxis?

What concerns people most about this form of transport?

3.5.5.13 Transporting dangerous substances such as petrol or gas

Should the driver receive special training?

An accident involving such a vehicle can be extremely dangerous. What must a driver do to prevent accidents?

3.5.5.14 The work of an ambulance driver

Is an ambulance driver allowed to drive as fast as he / she can in order to save a life?

How long is an ambulance driver’s training?

3.5.6 Assessment

3.5.7 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

3.5.7.1 Assessment Standard

We know this when the learner:

1.2 organises information under given headings;

1.7 uses geographical and environmental concepts and terms to report on enquiries in different ways (e.g. writing a paragraph, using a poster, artwork).

3.5.7.2 LEARNING OUTCOME 2: GEOGRAPHICAL KNOWLEDGE AND UNDERSTANDING

The learner will be able to demonstrate geographical and environmental knowledge and understanding.

3.5.7.3 Assessment Standard

We know this when the learner:

- describes the features of the local settlement, including land uses, and compares them with examples from other places;
- describes the importance of access to resources and services for people living in settlements;

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
2.3 describes how basic human needs were met in the past and at present.

3.5.8 LEARNING OUTCOME 3: EXPLORING ISSUES
The learner will be able to make informed decisions about social and environmental issues and problems.

3.5.8.1 Assessment Standard
We know this when the learner:
3.2 identifies the factors that influence why some people have better access to resources compared to others in a particular context.

3.5.9 Memorandum
3.5.9.1 The value of transport services and roads

<table>
<thead>
<tr>
<th></th>
<th>Public transport</th>
<th>Private transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorcar</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Taxi</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Bus</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Train</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Bicycle</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 3.9

1. Stone Fuel Wheat/seed
2. Sand Oil Maize
3. Bricks Spare parts Fruit
4. Cement Broken vehicles Compost
5. Roof trusses Animal feed/water

3.6 Municipal Services⁶
3.6.1 GEOGRAPHY
3.6.2 Grade 4
3.6.3 RESOURCES AND SERVICES WITHIN A SETTLEMENT
3.6.4 MUNICIPAL SERVICES
3.6.5 Module 18
3.6.6 Municipal services
A variety of services are rendered to the community by the local government (municipality). Can you think of activities that municipal workers are involved in on a regular basis in your neighbourhood?

⁶This content is available online at <http://cnx.org/content/m25367/1.1/>.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
3.6.6.1 Activity 1

3.6.6.2 To determine the services that people expect from the municipal authorities [LO 2.2, 2.3]

Divide the class into groups and undertake an OPINION POLL amongst GROWN-UPS to determine what people expect of a local government. Ensure that people of a lower, middle and higher income-group are interviewed.

3.6.6.3 Include the following questions:

- Give FOUR REASONS why you would rather live in an URBAN ENVIRONMENT than in the country.
- What FOUR SERVICES, according to you, are the MOST IMPORTANT that a municipality must render?
- Which municipal services, do you think, are UNNECESSARY?
- ALSO INCLUDE A QUESTION OR TWO OF YOUR OWN CHOICE

Make a list of at least six services that people expect of their local municipality.

3.6.6.4 The services in a well planned city or large town

3.6.6.5 Activity 2

3.6.6.6 To determine which services are the most important [LO 3.2, 3.3]

<table>
<thead>
<tr>
<th>Housing</th>
<th>Electricity supply</th>
<th>Land for education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial land</td>
<td>Recreational areas</td>
<td>Sewerage</td>
</tr>
<tr>
<td>Refuse management</td>
<td>Business centres</td>
<td>Transport services</td>
</tr>
<tr>
<td>Water supply</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Have a quick group discussion and decide on the importance of each of these services. Rate them on a scale of 1 (most important) to 9. A spokesperson for each group must then point out their three most important services and the least important one and also motivate the choice.

Table 3.10

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
3.6.7 Assessment

3.6.8 LEARNING OUTCOME 2: GEOGRAPHICAL KNOWLEDGE AND UNDERSTANDING
The learner will be able to demonstrate geographical and environmental knowledge and understanding.

3.6.8.1 Assessment Standard
We know this when the learner:

- describes the importance of access to resources and services for people living in settlements;

2.3 describes how basic human needs were met in the past and at present.

3.6.9 LEARNING OUTCOME 3: EXPLORING ISSUES
The learner will be able to make informed decisions about social and environmental issues and problems.

3.6.9.1 Assessment Standard
We know this when the learner:

- identifies the factors that influence why some people have better access to resources compared to others in a particular context;

- suggests ways to improve access to resources in a particular context.

3.6.10 Memorandum

3.6.10.1 Municipal services
- Refuse removal
- Build and repair roads
- Parks
- Cut grass on sidewalks
- Sweep streets

3.7 Waste removal and recycling

3.7.1 GEOGRAPHY

3.7.2 Grade 4

3.7.3 RESOURCES AND SERVICES WITHIN A SETTLEMENT

3.7.4 Module 19

3.7.5 WASTE REMOVAL AND RECYCLING

3.7.6 Waste removal
The waste in your environment does not only include the refuse in your refuse bins, but also sewerage waste. Sewerage water contains dangerous germs, and cannot end up in rivers, lakes or the ocean without having

---

7This content is available online at <http://cnx.org/content/m25373/1.1/>.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
been purified. It will have a very harmful effect on plant and animal life. That is why sewerage water is purified at water-works.

Larger refuse can become a serious problem if it is not removed regularly.

How often does the waste removal truck call on your house?

Where is the refuse taken and what do they do with it?

---

3.7.6.1 Activity 1

3.7.6.2 To determine how waste is processed [LO 3.1]

Can you make suggestions how to get rid of waste without polluting the environment? Remember, the waste includes plastic (that does not decompose).

Although most of the waste is taken to dumping grounds where it is either incinerated or buried, it is not always the best alternative.
3.7.7 Recycling

3.7.7.1 Activity 2

3.7.7.2 To classify the examples of waste illustrated in this activity, according to the table [LO 1.2]

![Waste Illustrations]

**Figure 3.7**

<table>
<thead>
<tr>
<th>Reclaimable</th>
<th>Non-Reclaimable</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3.11**

Can you make a suggestion on what we should do with the waste in your households?

3.7.7.3 Interesting facts about the extent of the waste removal services in the city of Cape Town.

3.7.7.4 The City of Cape Town’s Task in Relation to Refuse Removal.

The City of Cape Town manages the area from Bloubergstrand to Gordon’s Bay. The refuse from 3,2 million residents as well as that of the factories and businesses is taken from 660 000 service points to six large dumping areas – 1.5 million tons of rubbish per year. This amount increases by 6% each year. The urban population has grown by 3,5% over the past few years. This means that people are producing more and more rubbish each year.
Research has shown that wealthy people generate 25 kg of rubbish per household each week, poor people generate 15 kg per household and the very poorest people in informal settlements generate 8 kg per house.

Unfortunately very little domestic refuse is recycled. People in Europe and the USA generate more refuse but fortunately also recycle much of it.

Remember: the more refuse we recycle, the less we have to get rid of.

3.7.7.5 Assessment

3.7.8 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

3.7.8.1 Assessment Standard

We know this when the learner:

1.2 organises information under given headings.

3.7.9 LEARNING OUTCOME 3: EXPLORING ISSUES

The learner will be able to make informed decisions about social and environmental issues and problems.

3.7.9.1 Assessment Standard

We know this when the learner:

3.1 identifies issues associated with resources and services in a particular context.

3.7.10 Memorandum

3.7.10.1 Waste removal

- Refuse dumps (recirculation – decomposition)
Chapter 4

Term 4

4.1 The story of food

4.1.1 GEOGRAPHY

4.1.2 Grade 4

4.1.3 FOOD PRODUCTION IN SOUTH AFRICA

4.1.4 Module 20

4.1.5 THE STORY OF FOOD

The story of food

Food is an important part of our everyday lives. We need food to grow, stay healthy and to stay alive. But there are people whose lives are only focused on food – they live to eat!

Before we look at how food is produced in the 21st century, it is important to find out how our predecessors managed to put food on their plates from day to day.

---

1This content is available online at <http://cnx.org/content/m25375/1.1/>.
4.1.5.1 Activity 1

4.1.5.2 To study illustrations and fill in missing words in a paragraph to complete a story about food [LO 2.3]
Table 4.1
4.1.5.3 (Possible answers: trade; hunter; herdsmen; wild plants; plough; meat; farmers)

Many years ago, the food that people ate was very different from the food we eat. At first, people lived as - gatherers who moved from place to place looking for animals to hunt for food. They lived in temporary shelters and when game became less plentiful, they moved to another place. They ate that they picked, with their meat. Their drinking water was gathered by catching rain or dew, or by fetching it from rivers or dams.

The hunters began gathering sheep and goats and herds of cattle, and so became who travelled around with their own flocks in search of good grazing. They had milk and and did not need to hunt.

The herdsmen became . They lived in one place where they could grow their own grain from the seeds of wild grasses. They lived in small groups near fresh water. They invented the to help them work the land. They found new ways to transport water to their lands (irrigation). Some of the communities expanded and experimented with different food crops, like maize, sorghum, pumpkins, squashes, wild watermelons, etc.

Portions of the harvests were put away to ensure that they would have food for the whole year and some crops were taken to nearby villages to it for other food or products.

Farming methods changed with the development of technology. The wooden ploughs of the past were replaced with iron ploughs. Instead of being pushed by people, up to twenty ploughs can nowadays be pulled by one air-cooled tractor.

4.1.6 Assessment

4.1.7 LEARNING OUTCOME 2: GEOGRAPHICAL KNOWLEDGE AND UNDERSTANDING

The learner will be able to demonstrate geographical and environmental knowledge and understanding.

4.1.7.1 Assessment Standard

We know this when the learner:

- describes how basic human needs were met in the past and at present.

4.1.8 Memorandum

The story of food

- Hunter
- Fruit and seeds
- Wild plants
- Herdsmen
- Meat
- Farmers
- Plough
- Trade

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
CHAPTER 4. TERM 4

4.2 Commercial and subsistence farming

4.2.1 GEOGRAPHY

4.2.2 Grade 4

4.2.3 FOOD PRODUCTION IN SOUTH AFRICA

4.2.4 Module 21

4.2.5 COMMERCIAL AND SUBSISTENCE FARMING

4.2.6 Commercial and subsistence farming

---

Figure 4.1

---

A

---

Figure 4.2

---

B

2 This content is available online at http://cnx.org/content/m25387/1.1/.
4.2.6.1 Activity 1

4.2.6.2 To compare sketches illustrating two farms with regard to given criteria [LO 1.6]

<table>
<thead>
<tr>
<th></th>
<th>Sketch A</th>
<th>Sketch B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farming methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultivated products</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.3

In sketch A the people living on the land farm to meet their own needs only. They usually do not need a large piece of land. They only produce enough food for their own use. They sometimes have food left to exchange or sell to supply in the need of other people. A variety of crops is planted, and they also provide their own meat, eggs and milk. The farmer and his family do all the work themselves as they do not make a profit from farming and can therefore not pay wages. This kind of farmer is known as a **subsistence farmer**.

The farmer in sketch B farms with one main crop, namely maize. He produces large quantities that he sells at a profit. He is able to live on the money for a long time and can also buy seed for the next harvest. He does not produce his crop for his own use and therefore buys the food he wants to eat. These farmers are known as **commercial farmers** and their motive for farming is the profit they can make.

4.2.6.3 Activity 2

4.2.6.4 To plan your own subsistence farming [LO 1.7]

Make a list of the basic foods that you need for survival.

You are now a subsistence farmer. Suppose that you have been given a piece of land of approximately 5 000 square metres (70 x 70 metres or half a hectare) in the southern Cape where the soil is very fertile. There is a farmhouse with all necessary services, a dam, a permanent river and fencing on the land. Remember what the basic foodstuffs that you need for survival are and start planning your farming activities. Draw a plan (map) with a key to show what your farm will look like from the air.

4.2.7 Assessment

4.2.8 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

Available for free at Connexions [http://cnx.org/content/col11084/1.1]
4.2.8.1 **Assessment Standard**

We know this when the learner:

1.6 uses information from sources (including own observations) to answer questions about people and places (e.g. “Why is it like that?”) [answers the question];

1.7 uses geographical and environmental concepts and terms to report on enquiries in different ways (e.g. writing a paragraph, using a poster, artwork).

4.2.9 **Memorandum**

<table>
<thead>
<tr>
<th>Sketch A</th>
<th>Sketch B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Buildings</strong></td>
<td></td>
</tr>
<tr>
<td>Small house</td>
<td>Farm homestead and garage-Barn-Silos</td>
</tr>
<tr>
<td><strong>Implements</strong></td>
<td></td>
</tr>
<tr>
<td>Hand plough-Horse-Pounding</td>
<td>Tractors-Plough-shares</td>
</tr>
<tr>
<td>block</td>
<td></td>
</tr>
<tr>
<td><strong>Farming methods</strong></td>
<td></td>
</tr>
<tr>
<td>With manual labour-Few</td>
<td>Mechanical-Many labourers-Large scale</td>
</tr>
<tr>
<td>labourers-Small scale</td>
<td></td>
</tr>
<tr>
<td>Supplies in own needs</td>
<td></td>
</tr>
<tr>
<td><strong>Cultivated products</strong></td>
<td></td>
</tr>
<tr>
<td>Something of everything</td>
<td>Focussed on selected crops</td>
</tr>
<tr>
<td>according to own needs</td>
<td></td>
</tr>
</tbody>
</table>

| Table 4.4                     |

Milk
Bread
Butter
Vegetables
Meat
Eggs

4.2.9.1 **Make provision for:**

Cattle
Sheep
Chickens
Wheat
Maize
Vegetables

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
4.3 Stock farming

4.3.1 GEOGRAPHY

4.3.2 Grade 4

4.3.3 FOOD PRODUCTION IN SOUTH AFRICA

4.3.4 Module 22

4.3.5 STOCK FARMING

4.3.6 Stock farming comprises large stock farming (slaughter stock, dairy cattle and horses), small stock farming (sheep and goats) and poultry farming (chickens).

4.3.6.1 Activity 1

4.3.6.2 To make a list of as many examples as possible of foodstuffs obtained from animals. You could also make a large poster with examples of the packaging in which these products appear on the shelves of shops. [LO 1.7]

Make a list of as many examples as possible of foodstuffs that we get from animals. You could also make a large poster with examples of the packaging in which these products are sold in shops.

This content is available online at <http://cnx.org/content/m25393/1.1/>.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
4.3.6.3 Activity 2

4.3.6.4 To study a map that shows the distribution of large and small stock farming in South Africa and to answer the questions [LO 1.1]

Figure 4.3

Are there any provinces in South Africa where there is no stock farming?

Where is sheep farming mainly practised? Discuss possible reasons for this in your groups.

What is the main type of stock farming in the Limpopo province?

Can you suggest any reason why there is little stock farming in Gauteng?

4.3.7 Assessment

4.3.8 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

4.3.8.1 Assessment Standard

We know this when the learner:

1.1 identifies information from various sources (maps, atlases, books) [finds sources];

1.7 uses geographical and environmental concepts and terms to report on enquiries in different ways (e.g. writing a paragraph, using a poster, artwork).

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
4.3.9 Memorandum

4.3.9.1 The distribution of large and small stock farming in South Africa

- No
- North Cape and Free State – natural grazing
- Cattle
- Small – industrial; many cities; little rural areas available

4.4 Poultry farming⁴

4.4.1 GEOGRAPHY

4.4.2 Grade 4

4.4.3 FOOD PRODUCTION IN SOUTH AFRICA

4.4.4 Module 23

4.4.5 Poultry Farming

How frequently does your family have chicken or eggs at a meal? Where does it come from? Poultry farmers can be divided into two categories:

⁴This content is available online at <http://cnx.org/content/m25397/1.1/>.
<table>
<thead>
<tr>
<th>Definition</th>
<th>Egg farmers</th>
<th>Table fowl farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>How it works</td>
<td>• Hens start laying when they are 18 weeks old.</td>
<td>• Cocks and hens are kept, to have fertilised eggs.</td>
</tr>
<tr>
<td></td>
<td>• They are kept in batteries.</td>
<td>• Eggs are placed in a hatching chamber in a hatchery.</td>
</tr>
<tr>
<td></td>
<td>• The hen is most productive at 20 weeks.</td>
<td>• Eggs hatch on day 21.</td>
</tr>
<tr>
<td></td>
<td>• From week 26 to 28 egg production drops (sold).</td>
<td>• Chicks are inoculated against diseases.</td>
</tr>
<tr>
<td></td>
<td>• Some are free-range chickens.</td>
<td>• Chicks are kept under heaters.</td>
</tr>
<tr>
<td></td>
<td>• Up to 50,000 under a single roof.</td>
<td>• Lights are kept burning for 16 hours per day.</td>
</tr>
<tr>
<td></td>
<td>• Temperature is controlled.</td>
<td>• Chicks are fed special food to make them grow quickly.</td>
</tr>
<tr>
<td></td>
<td>• Regular inoculation against disease.</td>
<td>• After 40 days the slaughter fowl weighs approximately 2 kg.</td>
</tr>
<tr>
<td></td>
<td>• Eggs not fertilised.</td>
<td>• It is ready for slaughtering and packaging.</td>
</tr>
<tr>
<td></td>
<td>• A hen lays approximately 300 eggs over a period of 52 weeks.</td>
<td>• Distributed to shops (whole or as pieces).</td>
</tr>
<tr>
<td></td>
<td>• Eggs are sorted according to size and shell quality.</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.5

4.4.6 Breeding

Chicks to be used for breeding are transferred to the breeding section when they are 21 weeks old. These hens and cocks are kept together in one breeding shed (ten hens to a cock). Eggs (hatching eggs) are laid in nests from week 22. Eggs are collected five times per day. Only some of the fertilised eggs are used for breeding. The cocks and the hens are fed a special diet and are sold, with the laying hens, when they are about 64 weeks old.
4.4.6.1 Why is chicken less expensive than red meat?

4.4.6.2 Activity 1

4.4.6.3 To discuss questions in groups and report the group’s findings to the rest of the class [LO 1.6, 1.7]

- Take a look at the sketch of laying hens in a battery. What do you think of the conditions under which these hens are kept?
- Why do you think the hens are kept in such small cages?

What is meant when someone talks about eggs laid in a hidden nest or hens laying eggs in hidden nests?

4.4.7 Assessment

4.4.8 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

4.4.8.1 Assessment Standard

We know this when the learner:
1.6 uses information from sources (including own observations) to answer questions about people and places (e.g. “Why is it like that?”) [answers the question];
1.7 uses geographical and environmental concepts and terms to report on enquiries in different ways (e.g. writing a paragraph, using a poster, artwork).

4.4.9 Memorandum
Chicken is cheaper than red meat because:

- Quicker; shorter life cycle; limited space needed for breeding; no need for grazing

4.5 Food crops*

4.5.1 GEOGRAPHY
4.5.2 Grade 4
4.5.3 FOOD PRODUCTION IN SOUTH AFRICA
4.5.4 FOOD CROPS
4.5.5 Module 24

The fertile soil and hard work of farmers in South Africa make it possible to produce large amounts of food for our own use as well as for export to other countries.

4.5.5.1 Activity 1
4.5.5.2 To complete a questionnaire concerning the distribution of fruit- and grain-farming areas in South Africa [LO 1.1]

Figure 4.6

Which of these kinds of food have you eaten this week?

*This content is available online at <http://cnx.org/content/m25400/1.1/>.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
Which of these products are cultivated in your province?

Which province is the main region for sugar cane cultivation?

In which province do they cultivate few products? (Try to suggest reasons for this.)

Name three provinces in which wheat is cultivated.

4.5.5.3 Activity 2

4.5.5.4 Select a product from the list on the previous page. It may be a good idea to choose the one you know best because you have to do a research task according to the set of criteria that is given below. Your research results must be presented in the form of a poster or a booklet. [LO 3.3]

4.5.5.5 THE CROP I HAVE CHOSEN:
- Location of farming in South Africa (You could provide a map)
- Reason for this location (rainfall, climate, water supply, distance from consumer, vegetation)
- Size of farm
- Lay-out of farm (sketch)
- Seasonal activities (e.g. tilling the soil, sowing in the autumn, etc.)
- Steps in the processing of the harvested product
- Final result after product has been processed for the shop shelves (examples of packaging)
- Importance of this product for South Africa (economic benefit / job creation)

4.5.6 Assessment

4.5.7 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY
The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

4.5.7.1 Assessment Standard
We know this when the learner:
1.1 identifies information from various sources (maps, atlases, books) [finds sources].

4.5.8 LEARNING OUTCOME 3: EXPLORING ISSUES
The learner will be able to make informed decisions about social and environmental issues and problems.
4.5.8.1 Assessment Standard

We know this when the learner:
3.3 suggests ways to improve access to resources in a particular context [makes choices].

4.5.9 Memorandum

4.5.9.1 The distribution of fruit- and grain-farming areas in South Africa

- KwaZulu Natal
- North Cape – dry
- Western Cape
- Eastern Cape
- Free State

4.6 The fishing industry

4.6.1 GEOGRAPHY

4.6.2 Grade 4

4.6.3 FOOD PRODUCTION IN SOUTH AFRICA

4.6.4 Module 25

4.6.5 THE FISHING INDUSTRY

When you look at a map of South Africa, you’ll see that the sea on three sides borders the country. South Africa has a very long coastline reaching from Alexander Bay in the Northwest to Kosi Bay on the north-easterly coast of KwaZulu-Natal. Many South Africans therefore also make a living from fishing.

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6This content is available online at <http://cnx.org/content/m25405/1.1/>.
FISHING AREAS in South Africa

- Larger fish like barracuda (snoek) and cob (kabeljou) are caught with hand lines from boats, while other deep-sea types like sardines and hake are caught in nets trailed from behind boats.
- The sea is a large source of food and approximately 30,000 people annually make a living from the fishing industry in South Africa. Many people also angle for sport. Besides the sea fish that are caught, smaller quantities of fresh water fish also appear in delicious dishes on many tables.
4.6.5.1 Can you find three reasons for the importance of the fishing industry to South Africa in the above paragraphs?

4.6.5.2 Activity 1

4.6.5.3 To fill in as many examples as possible in a table [LO 1.2]

<table>
<thead>
<tr>
<th>Fish as Food</th>
<th>Sea fish</th>
<th>Fresh water fish</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Table 4.6
Activity 2: To complete a flow diagram on the processing of fish [LO 1.1]

Study the following sketches and complete the diagram.

### Table 4.7

#### 4.6.5.4 Processing of fish

#### 4.6.5.5 (flow diagram)

#### 4.6.6 Assessment

#### 4.6.7 LEARNING OUTCOME 1: GEOGRAPHICAL ENQUIRY

The learner will be able to use enquiry skills to investigate geographical and environmental concepts and processes.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
4.6.7.1 Assessment Standard

We know this when the learner:
1.1 identifies information from various sources (maps, atlases, books) [finds sources].
1.2 organises information under given headings [works with sources].

4.6.8 Memorandum

4.6.8.1 The processing of fish

- Fish is caught in different ways e.g. dragnets; hand lines.
- Fish is weighed, cleaned and sold.
- Fish is transported to factories (industrial) where it is processed.
- Fish is processed to products such as fish oil, fishcakes, fish fingers, and fresh fish for frying or braaing.

4.7 Access to food

4.7.1 GEOGRAPHY

4.7.2 Grade 4

4.7.3 FOOD PRODUCTION IN SOUTH AFRICA

4.7.4 Module 26

4.7.5 ACCESS TO FOOD

Figure 4.8

Have you ever seen somebody holding a poster like this?
Yes, many people in South Africa do not have enough food from day to day.

available online at <http://cnx.org/content/m25408/1.1/>.

Available for free at Connexions <http://cnx.org/content/col11084/1.1>
4.7.5.1 Activity 1

4.7.5.2 To draw up a list of possible reasons why people do not have enough food to eat [LO 3.1, 3.2, 3.3]

Draw up a list of possible reasons why people might not have enough food to eat. First discuss this fully in your groups.

                                      .................................................................
                                      .................................................................
                                      .................................................................
                                      .................................................................
                                      .................................................................
                                      .................................................................
                                      .................................................................
                                      .................................................................
                                      .................................................................

Now the different groups can get the educator to help with consolidating the reasons listed to put them together in one list and to make suggestions about how the problem of lack of access to food can be addressed. If there is a food need in your immediate environment, the grade / school could think of ways in which to become involved in projects that address this problem.

4.7.6 Assessment

4.7.6.1 LEARNING OUTCOME 3: EXPLORING ISSUES

The learner will be able to make informed decisions about social and environmental issues and problems.

4.7.6.2 Assessment Standard

We know this when the learner:

3.1 identifies issues associated with resources and services in a particular context;

3.2 identifies the factors that influence why some people have better access to resources compared to others in a particular context;

• suggests ways to improve access to resources in a particular context.

4.7.7 Memorandum

4.7.7.1 Possible reasons why people do not have enough food to eat

• Unemployed
• No income
• Lives far from services
• Poor transport
• No cooling facilities (food becomes bad)
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