

Unit 11

The Pursuit of Wisdom

Introduction

In this unit, you will further develop your understanding of topics like knowledge and communicating, interpreting and evaluating information. Along with this you will explore scientific methods of collecting and analyzing data. You will learn that developing the habit of reading is important to enrich you with knowledge that you will need for life.

Lessons

1. Knowledge
2. Information as a Source of Knowledge
3. Developing Reading Habits

What you will learn

You will:

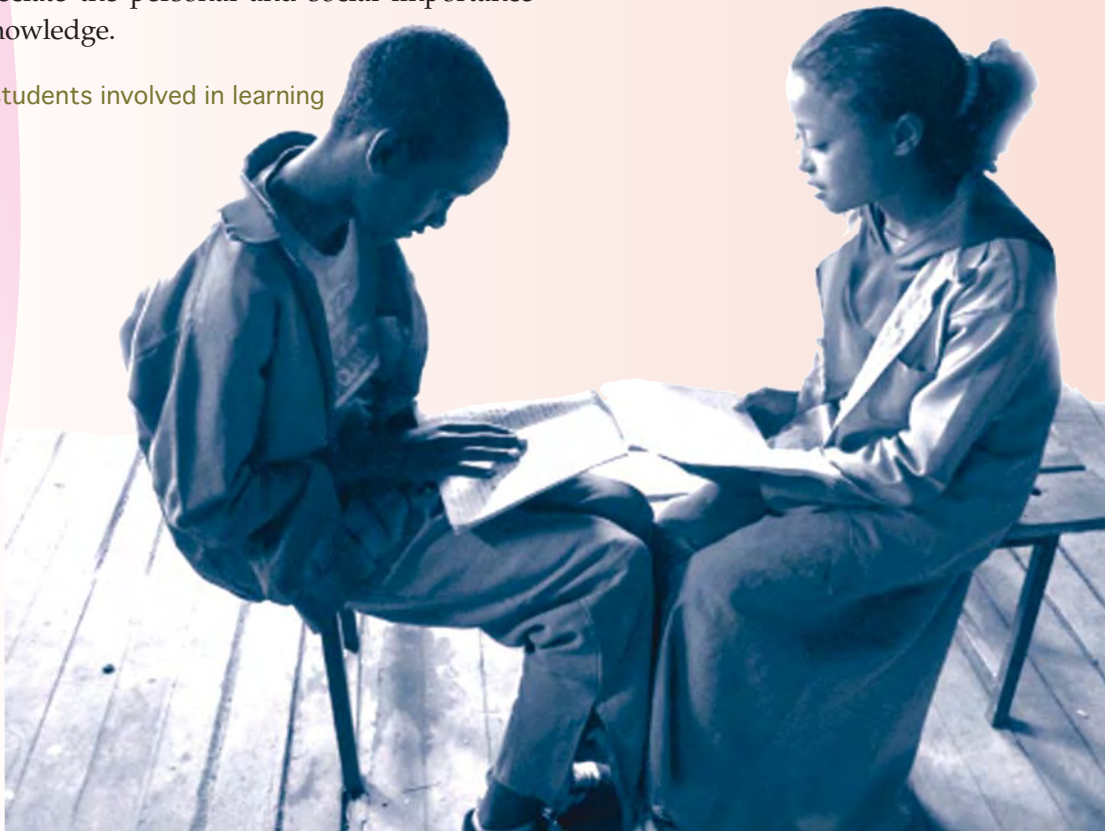
- appreciate the personal and social importance of knowledge.

Young students involved in learning

- recognize how information becomes knowledge.

Key words and concepts

- Hypothesis
- Qualitative data
- Quantitative data
- Social utility



LESSON 1

Knowledge

By the end of this lesson, you should be able to:

- describe the utilities of knowledge.

What are the benefits of knowledge for you and for society?

Knowledge is the most powerful tool in the hands of man. It influences the way man lives and interacts with nature. The developments in science and the transformations in technology have impacted greatly on social life. This transformation has brought a change in our conception of distance and time. Within seconds you can reach people in any corner

of the world. Mobile telephone technology, for example, has reduced barriers of communication. This has facilitated effectiveness and productivity on a global scale. Places separated by great distances can be easily reached in hours as air travel has become more common.

Due to the technological developments, which are manifestations of knowledge, the world no longer seems such a huge place as had been thought in the past. Through knowledge, society continues to change. You even see a transformation in yourself as it has the power to effectively alter your social status.

CASE STUDY

Professor Aklilu Lemma—an Ethiopian Scientist

Dr. Aklilu Lemma was one of the renowned scientists of Ethiopia. He discovered the medicine to cure bilharzia (schistosomiasis). Through observation and scientific investigation he identified the traditional and natural detergent called *endod* to kill the snails that cause bilharzia. His discovery was a breakthrough in the field of medicine and brought relief to millions in the world who suffer from this disease.

After his death, a foundation called the Aklilu Lemma Institute of Pathobiology was established at the AAU to promote scientific research in Ethiopia. The foundation awards scholarships to bright university students.



The way bilharzia is caused

? Form groups to discuss and evaluate how knowledge contributes to medical and scientific achievements.

Knowledge

Many great names in the world are linked to remarkable achievements. In Ethiopia there were great personalities whose achievements will long be remembered. We need to respect people with knowledge and follow in their footsteps to help change and transform our country.



Identify and describe the achievements of a great Ethiopian personality who has done much for the country. Share with the rest of the class.

CASE STUDY

Metier Afework Tekle — an Ethiopian Artist

Afework Tekle is Ethiopia's most well-known artist whose work is recognized across the world. He studied in England and travelled across Europe before returning to Ethiopia where he held the first significant art exhibition in Addis Ababa in 1954. This was followed by many other exhibitions around the world.

He works in a variety of media: paint, pen, stained glass etc., and his approaches to his subject include symbolism and abstract. He was influenced by Ethiopian heritage and African culture among other things. He met many other famous contemporary artists as he travelled round the world and received many awards. His work is a source of pride in Ethiopia and he continues to influence many new artists.



Afework's stained glass window in the AU building, Addis Ababa



How does an artist's knowledge benefit the country and the world? Discuss as a class.

REMEMBER

- ❑ Knowledge influences the way man lives and interacts with nature.
- ❑ Through knowledge, society continues to change.
- ❑ Knowledge enables us to make breakthroughs in all aspects of life including science and medicine.

L E S S O N

2

Information as a Source of Knowledge

By the end of this lesson, you should be able to:

- explain the sources and purposes of information.

If you were asked to research the achievements of Grade 12 students, where would you expect to find the information and what form would it take? Brainstorm in small groups then share with the rest of the class.

Information helps us to develop our knowledge. One of the methods through which we can gather information is through research. In carrying out research you identify different sources of information and data in various formats. To research Grade 12 students' achievements, there would be books, journals and other written documents, and these would be available in libraries and also in other educational organizations.

Quantitative data, in the form of statistics of grades achieved over previous years, could be found in your school and in other educational establishments including the Ministry of Education. Some data may be found on the internet. Interviews with teachers and students may provide qualitative

data, and/or a survey of past and present Grade 12 students could reveal information that could also be appropriate. You may have identified other sources in written, numerical, oral and other formats such as practical work, art and music. Thus, you can see that information can be communicated in a variety of ways.

Once you have gathered your information you need to interpret it. This does not simply mean translating it into a language you understand. If the information is quantitative, you will need to identify trends from which you can draw conclusions from the facts and figures. If it is qualitative, you will need to consider how much can be relied upon, and what can or cannot be substantiated or supported by other evidence.

You need to carefully analyze the information to draw out that which you will need. At this stage you will evaluate what is important and what is not. You can then discard that which is misleading or superfluous. You can then use the remaining information to justify your study and come up with conclusions.

Information as a Source of Knowledge

Copy this table. In previous grades, you learnt about information, knowledge and wisdom. Look at the table below showing the differences. In small groups complete the copy with examples to identify the relationships between each concept. For example, HIV/AIDS etc.

Information	Knowledge	Wisdom
Facts or figures obtained from reliable sources	Understanding information	Using knowledge effectively for a purpose



Knowledge is understanding or learning about that which is known. Information is also defined as knowledge in the form of facts. It is said that you acquire knowledge but you obtain information. This expression indicates that knowledge refers to something very wide in scope, but information refers to more specific facts obtained for a particular purpose. Wisdom is gained through the accumulation and practical use of knowledge.

Scientific methods of collecting and analyzing data involve thorough testing before a theory or hypothesis is accepted as a fact. A hypothesis is a problem that you need to solve through research. A desire for a potential cure for an illness, for example, may serve as a hypothesis which will lead to research into the use of a new drug. The

type of method used to collect data depends on the nature of research that you wish to carry out. In researching for a new drug, there will be a long process of collecting and analyzing data before a conclusion can be reached and the research results evaluated. The data that is collected and analyzed for a specific purpose will help to form a generalization or judgment. Based on this, recommendations are given to those concerned to enable them to make knowledge-based decisions.

? Compare the process of researching achievements of Grade 12 students with research into a new drug to cure a disease. How would each be undertaken, by whom and for what purpose? How would generalizations and recommendations be made in each case?

Information as a Source of Knowledge

CASE STUDY

UFOs and Space Aliens

When we discuss life on other worlds, we might be tempted to use UFO sightings and supposed visits by aliens from outer space as evidence to test our hypotheses. We do not do so for two reasons, both related to the reliability of these observations. First the reputation of the sources of UFO sightings and alien encounters does not give us confidence that these data are reliable. Most of the data are simply made up for the sake of sensation. Second, the remaining UFO sightings, those not simply

made up, do not survive careful examination. Most are mistakes or unconscious misinterpretations of natural events made by honest people. A number of unbiased studies have found no grounds for believing in UFOs.

Source: Adapted from Seeds, Michael A (2005) Foundations of Astronomy Eighth Edition

? What evidence could lead you to believe in UFOs and aliens from other planets?

REMEMBER

- ❑ Knowledge is a general understanding of nature and ideas.
- ❑ The evaluation of information and knowledge requires observation and experimentation.
- ❑ Wisdom means one's ability to use knowledge effectively for a given purpose.
- ❑ The types of methods used to collect data depends on the nature of the research one intends to carry out.
- ❑ The data collected and analyzed for a specific purpose help to make generalizations and recommendations.

L E S S O N

3

Developing Reading Habits

By the end of this lesson, you should be able to:

- describe the importance of reading.

Brainstorm ways that you can improve your reading habits. Share your ideas with the class and discuss.

The habit of reading is linked to the pursuit of wisdom. Developing a reading habit expands the frontiers of knowledge. Some societies in the world, particularly the industrialized countries, have developed the habit of reading. A widely read population is also an informed public which can make informed judgments. However, a society like ours is not knowledge based because the culture of reading is at the early stages of development. Therefore, we need to develop this culture for the good of the people and the benefit of the country.

Your interest in reading may start with reading books, comics or magazines for pleasure. Without a purpose, reading is meaningless, and there cannot be any conscious activity. By reading your course books, magazines, newspapers and textbooks for information you will expand your reading and develop all-round knowledge. Reading requires you to draw out the main ideas and also involves reviewing the content and developing a general picture that can be stored for future use. When you read for knowledge, you should try to summarize and review (either in your head or by taking brief notes) to make the purpose of reading more fruitful.



Compare the methods you use to take notes with others in the class. Can you identify more effective methods that will help you in further study?

Truth

One of the philosophical approaches to truth states that it is relative to space and time. This is what is called the relativity of truth and it means there is no absolute or fixed truth. What is believed to be true for a given society may not be true for another. Equally, what is true for a society today, may not remain true tomorrow or thereafter.

The second theory of truth is called the pragmatic theory of truth where truth is measured by its usefulness or utility. What is true is that which is useful for a person, group or even a country. What is false is the reverse of this. This theory rejects the thinking held by the ancient Greek philosophers such as Plato and Aristotle that truth is absolute. This pragmatic theory was developed in the nineteenth and twentieth centuries by American philosophers, namely Charles S. Pierce, William James and John Dewey. They also believed that their theory of truth was dynamic, practical and measurable.

The pragmatic theory of truth resembles some sayings in our own societies, for example, the Amharic saying “Washto Kematalat Washto Mastarek”. In different cultures similar sayings could exist. Such a saying measures truth in terms of outcomes. If the outcome is desirable, then the means employed to achieve it are justified.

Developing Reading Habits

Scientific theory differs from these theories of truth in that scientific facts are not relative or measured by utility to individuals or groups. They depend purely on objective facts which remain the same for everyone, all the time.

? In small groups think of an example for each theory (relativity of truth, pragmatic theory and scientific theory). Share your ideas with the rest of the class.

CASE STUDY

Book clubs for friends

There was a teacher in a college who used to tell his students that books are the best of friends for they never fail those who like them. He advised his students to form book clubs to keep them united. Taking his advice a group of students established book clubs which met every Saturday afternoon and Sunday morning. They assigned their members to read at least one book every week and present a summary to the rest for discussion. Some of these clubs invited their teacher who had motivated them to establish the clubs, and whenever he met the members he would also present them with suggestions of one or more books that he had read.

The book clubs helped the members develop the habit of reading. Consequently, those same club members are respected in their workplaces because of the maturity and knowledge that they now display.

? Discuss ways to develop reading habits and increase knowledge and wisdom.



The donkey library in Hawassa bringing books to the children

REMEMBER

- The habit of reading is linked to the pursuit of wisdom.
- Developing reading habits expands the frontiers of knowledge.
- When you read you should summarise and review to make the purpose of reading fruitful.
- The relativity of truth is a theory stating that truth is dependent on time and space.
- The pragmatic theory of truth measures truth in terms of its utility.
- Scientific truths depend purely on objective facts which remain the same for everyone.

UNIT SUMMARY

This unit is meant to further enrich your understanding about knowledge. You should now know how information and data are essential for developing your knowledge and increasing your wisdom. You will acknowledge the importance of a good reading habit and identify ways that you can develop this further to the benefit of your country and yourself, in your future studies and career.

By understanding some of the theories related to truth you will also realize how information can be determined as true or false.

GLOSSARY

<i>Hypothesis:</i>	A theory or idea that is the basis of research.
<i>Qualitative data:</i>	Information based on personal reflections of a sample group.
<i>Quantitative data:</i>	Information based on facts and figures.
<i>Social utility:</i>	Something that is good for society.

This is the last unit of Grade 12. No questions have been included here as you will now need to revise all the units for your examination. If you have not thought about a strategy for revision, and do not have time to read this book again, focus on the 'Remember' sections at the end of each lesson and read the summaries of each unit.

Good luck.