

MATERIAL COVERED:

The Science 7 course is divided into three major units:

Life Science: Ecosystems

- Organisms and Their Environment
- Cycles in Ecosystems
- Ecosystems and People

Physical Science: Chemistry

- Characteristics and Properties of Matter
- Classifying Matter
- Exploring Solutions

Earth Science: Earth's Crust

- The Composition of Planet Earth
- Earth's Moving Crust
- Earth's Changing Surface

TEXTBOOK:

The course uses the following text:
BC Science 7

McGraw-Hill Ryerson (ISBN 0-07-094786-4)

EVALUATION:

This course works on a mastery system. You must pass the mastery tests in each unit to the 80% level before you can go on. In addition, there are cumulative tests from time to time. These are tests you can take only once, so studying before them is essential to doing well. Your final mark for the course is based 60% on mastery tests and 40% on cumulative tests.

GOAL

The goal of this chapter is to better understand how the interaction of biotic and abiotic components of the environment determines the roles and interactions of organisms.

OBJECTIVES

After completing this chapter you will be able to describe:

- How the living and non-living parts of an environment interact.
- How populations, communities, and ecosystems are different.
- What roles plants and animals play and ecosystems.
- Why many different organisms and ecosystems are found in British Columbia.
- How people interact with ecosystems.

WHAT TO DO IN THIS UNIT

1. Ask your teacher for the Chapter 1 Worksheet.
2. In the textbook, read Chapter 1, starting on p. 4.
3. Remember, it is best to read the whole chapter first to get an overview of the content before attempting to answer the worksheet questions. Pay particular attention to the words that are highlighted in yellow. They are sure to show up on a test!
4. Answer the questions in the Chapter 1 Worksheet. This will help you organize and understand what you have read. Ask your teacher if you should hand in your worksheet for marking.
5. If you or your teacher think you need more practice, use the "Check Your Understanding" sections at the end of the sub-chapters and complete the Chapter 1 Review on page 32 to ensure that you are ready to write the Chapter 1 Test.
6. When you are ready, ask your teacher for the Chapter 1 Test. Remember, you must get 80% to pass, so studying hard is essential.

GOAL

The goal of this chapter is to learn how the cycles in ecosystems impact on organisms.

OBJECTIVES

After completing this chapter you will be able to describe:

- How plants and animals are interconnected in ecosystems.
- How energy is transferred through ecosystems.
- What abiotic and biotic cycles occur in ecosystems.
- What factors limit the sizes of populations.
- How ecosystems change over time.

WHAT TO DO IN THIS UNIT

1. Ask your teacher for the Chapter 2 Worksheet.
2. In the textbook, read Chapter 2, starting on p. 34.
3. Remember, it is best to read the whole chapter first to get an overview of the content before attempting to answer the worksheet questions. Pay particular attention to the words that are highlighted in yellow. They are sure to show up on a test!
4. Answer the questions in the Chapter 2 Worksheet. This will help you organize and understand what you have read. Ask your teacher if you should hand in your worksheet for marking.
5. If you or your teacher think you need more practice, use the "Check Your Understanding" sections at the end of the sub-chapters and complete the Chapter 2 Review on page 60 to ensure that you are ready to write the Chapter 2 Test.
6. When you are ready, ask your teacher for the Chapter 2 Test. Remember, you must get 80% to pass, so studying hard is essential.

GOAL

The goal of this chapter is to learn how people learn about and impact upon an ecosystem.

OBJECTIVES

After completing this chapter you will be able to describe:

- Ways in which people learn about ecosystems.
- How people can affect ecosystems in negative ways.
- How people can help ecosystems.

WHAT TO DO IN THIS UNIT

1. Ask your teacher for the Chapter 3 Worksheet.
2. In the textbook, read Chapter 3, starting on p. 62.
3. Remember, it is best to read the whole chapter first to get an overview of the content before attempting to answer the worksheet questions. Pay particular attention to the words that are highlighted in yellow. They are sure to show up on a test!
4. Answer the questions in the Chapter 3 Worksheet. This will help you organize and understand what you have read. Ask your teacher if you should hand in your worksheet for marking.
5. If you or your teacher think you need more practice, use the "Check Your Understanding" sections at the end of the sub-chapters and complete the Chapter 3 Review on page 90 to ensure that you are ready to write the Chapter 3 Test.
6. When you are ready, ask your teacher for the Chapter 3 Test. Remember, you must get 80% to pass, so studying hard is essential.
7. Go over your work from Chapters 1–3 in preparation for Cumulative Test #1. Remember, this test may only be taken once, so study hard to get a good mark on it.

GOAL

The goal of this chapter is to learn how matter is classified through its properties and characteristics.

OBJECTIVES

After completing this chapter you will be able to describe:

- What properties you can use to describe matter.
- How physical changes of matter are different from chemical changes of matter.
- How to measure mass and volume, and calculate density.
- How the particle model of matter explains the states and changes of matter.

WHAT TO DO IN THIS UNIT

1. Ask your teacher for the Chapter 4 Worksheet.
2. In the textbook, read Chapter 4, starting on p. 100.
3. Remember, it is best to read the whole chapter first to get an overview of the content before attempting to answer the worksheet questions. Pay particular attention to the words that are highlighted in yellow. They are sure to show up on a test!
4. Answer the questions in the Chapter 4 Worksheet. This will help you organize and understand what you have read. Ask your teacher if you should hand in your worksheet for marking.
5. If you or your teacher think you need more practice, use the "Check Your Understanding" sections at the end of the sub-chapters and complete the Chapter 4 Review on page 128 to ensure that you are ready to write the Chapter 4 Test.
6. When you are ready, ask your teacher for the Chapter 4 Test. Remember, you must get 80% to pass, so studying hard is essential.

GOAL

The goal of this chapter is to learn about classifying matter as either pure substances or mixtures.

OBJECTIVES

After completing this chapter you will be able to describe:

- How to identify the mixtures all around you.
- How to distinguish between different kinds of mixtures.
- A theory that will help you visualize particles of matter.

WHAT TO DO IN THIS UNIT

1. Ask your teacher for the Chapter 5 Worksheet.
2. In the textbook, read Chapter 5, starting on p. 130.
3. Remember, it is best to read the whole chapter first to get an overview of the content before attempting to answer the worksheet questions. Pay particular attention to the words that are highlighted in yellow. They are sure to show up on a test!
4. Answer the questions in the Chapter 5 Worksheet. This will help you organize and understand what you have read. Ask your teacher if you should hand in your worksheet for marking.
5. If you or your teacher think you need more practice, use the "Check Your Understanding" sections at the end of the sub-chapters and complete the Chapter 5 Review on page 156 to ensure that you are ready to write the Chapter 5 Test.
6. When you are ready, ask your teacher for the Chapter 5 Test. Remember, you must get 80% to pass, so studying hard is essential.

GOAL

The goal of this chapter is to investigate solutions.

OBJECTIVES

After completing this chapter you will be able to describe:

- How concentrated solutions and dilute solutions are different.
- How to identify acids and bases.
- How to separate the parts of a solution.

WHAT TO DO IN THIS UNIT

1. Ask your teacher for the Chapter 6 Worksheet.
2. In the textbook, read Chapter 6, starting on p. 158.
3. Remember, it is best to read the whole chapter first to get an overview of the content before attempting to answer the worksheet questions. Pay particular attention to the words that are highlighted in yellow. They are sure to show up on a test!
4. Answer the questions in the Chapter 6 Worksheet. This will help you organize and understand what you have read. Ask your teacher if you should hand in your worksheet for marking.
5. If you or your teacher think you need more practice, use the "Check Your Understanding" sections at the end of the sub-chapters and complete the Chapter 6 Review on page 186 to ensure that you are ready to write the Chapter 6 Test.
6. When you are ready, ask your teacher for the Chapter 6 Test. Remember, you must get 80% to pass, so studying hard is essential.
7. Go over your work from Chapters 4–6 in preparation for Cumulative Test #2. Remember, this test may only be taken once, so study hard to get a good mark on it.

GOAL

The goal of this chapter is to learn about the structure of the Earth, its resources and Earth materials.

OBJECTIVES

After completing this chapter you will be able to describe:

- What the inside of Earth looks like.
- How to identify rocks and minerals.
- How minerals and mineral resources can be used.
- How rocks and fossils are formed.

WHAT TO DO IN THIS UNIT

1. Ask your teacher for the Chapter 7 Worksheet.
2. In the textbook, read Chapter 7, starting on p. 196.
3. Remember, it is best to read the whole chapter first to get an overview of the content before attempting to answer the worksheet questions. Pay particular attention to the words that are highlighted in yellow. They are sure to show up on a test!
4. Answer the questions in the Chapter 7 Worksheet. This will help you organize and understand what you have read. Ask your teacher if you should hand in your worksheet for marking.
5. If you or your teacher think you need more practice, use the "Check Your Understanding" sections at the end of the sub-chapters and complete the Chapter 7 Review on page 224 to ensure that you are ready to write the Chapter 7 Test.
6. When you are ready, ask your teacher for the Chapter 7 Test. Remember, you must get 80% to pass, so studying hard is essential.

GOAL

The goal of this chapter is to learn how rocks are changed and about the evidence for the theory of continental drift.

OBJECTIVES

After completing this chapter you will be able to describe:

- How rocks are changed and recycled.
- How the theory of continental drift was developed.
- What major features are found on the sea floor.
- What recent advances in technology have revealed about the sea floor.
- How the plates of the lithosphere interact.

WHAT TO DO IN THIS UNIT

1. Ask your teacher for the Chapter 8 Worksheet.
2. In the textbook, read Chapter 8, starting on p. 226.
3. Remember, it is best to read the whole chapter first to get an overview of the content before attempting to answer the worksheet questions. Pay particular attention to the words that are highlighted in yellow. They are sure to show up on a test!
4. Answer the questions in the Chapter 8 Worksheet. This will help you organize and understand what you have read. Ask your teacher if you should hand in your worksheet for marking.
5. If you or your teacher think you need more practice, use the "Check Your Understanding" sections at the end of the sub-chapters and complete the Chapter 8 Review on page 254 to ensure that you are ready to write the Chapter 8 Test.
6. When you are ready, ask your teacher for the Chapter 8 Test. Remember, you must get 80% to pass, so studying hard is essential.

GOAL

The goal of this chapter is to learn about Earth's changing surface.

OBJECTIVES

After completing this chapter you will be able to describe:

- How wind, ice, and water change the surface of British Columbia.
- The different types of faulting.
- How earthquakes are recorded and studied.
- How to prepare for an earthquake.
- The different types of volcanoes.
- How the age of rocks is determined.
- The major events in geologic time.

WHAT TO DO IN THIS UNIT

1. Ask your teacher for the Chapter 9 Worksheet.
2. In the textbook, read Chapter 9, starting on p. 256.
3. Remember, it is best to read the whole chapter first to get an overview of the content before attempting to answer the worksheet questions. Pay particular attention to the words that are highlighted in yellow. They are sure to show up on a test!
4. Answer the questions in the Chapter 9 Worksheet. This will help you organize and understand what you have read. Ask your teacher if you should hand in your worksheet for marking.
5. If you or your teacher think you need more practice, use the "Check Your Understanding" sections at the end of the sub-chapters and complete the Chapter 9 Review on page 284 to ensure that you are ready to write the Chapter 9 Test.
6. When you are ready, ask your teacher for the Chapter 9 Test. Remember, you must get 80% to pass, so studying hard is essential.
7. Go over your work from Chapters 7–9 in preparation for Cumulative Test #3. Remember, this test may only be taken once, so study hard to get a good mark on it.

Congratulations! You've finished Science 7!