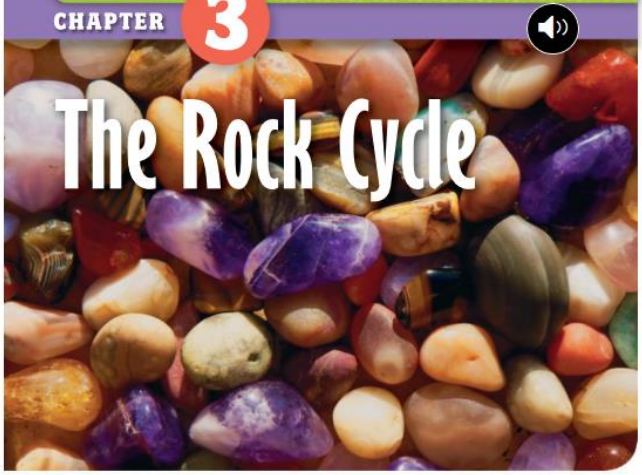
CHAPTER 3

The Rock Cycle



Rocks are always changing from one type to another in a never-ending cycle called the **rock cycle**. This means that rocks you see today were probably different a long time ago. The rocks will keep changing in the future. The rock cycle is a long, slow process that never stops.

rock cycle – the process that happens over a long period of time in which one type of rock changes into another type of rock

In the rock cycle any type of rock can change into another type of rock. For example, under great heat and pressure, igneous rock can change into metamorphic rock. But if metamorphic rock is pushed deep within Earth it can melt. The magma can then cool to form igneous rock. Look at the diagram below to see how rocks can change into different types.

Recycling

Do you **recycle** material at your school or home? When you recycle aluminum cans, they can be turned into other aluminum products.

Think of the rock cycle as one of Earth's recycling programs. Older rocks are constantly changed to make younger rocks. These rocks then start to change and the cycle starts all over again.

recycle – to reuse

KEY IDEA Over a long period of time, rocks can change from one type to another in the rock cycle.

Use esta tabla para contestar las preguntas. Options:

A, B or C

YOUR TURN

INTERPRET DATA

Rocks were collected in three different areas. Look at the chart and answer the questions.

Rock	Number Found		
	Area A	Area B	Area C
Metamorphic	4	8	2
Sedimentary	12	2	0
Igneous	2	9	3

Where were most sedimentary rocks found?
Area -- Select --

Where were the fewest sedimentary rocks found?
Area -- Select --

Which area had the most metamorphic and igneous rocks? Area -- Select --

MAKE CONNECTIONS

Water on Earth moves from oceans, lakes, and rivers into the air. Then it falls in such forms as rain or snow. How is this process like the rock cycle?

EXPAND VOCABULARY

Mechanical is related to machines, tools, or physical forces. See how **mechanical** is used in these sentences:

- A **mechanical** pencil never needs sharpening.
- **Mechanical** weathering broke the rock in two.
- Since he has **mechanical** skills, he fixed the watch.
- The candy is made using a **mechanical** process.

Compare these meanings. Tell if **mechanical** relates to machines, tools, or physical forces.

Earth's Changing Surface: The Rock Cycle

Chapter 3: The Rock Cycle

GREEN LEVEL
Student Book,
pages 16-18

USE KEY WORDS

Look at the Key Words on page 23 of your book.
Answer these questions about the Key Words in Chapter 3.

KEY WORDS
igneous rock
rock cycle
metamorphic rock

1. Melting and cooling changes any kind of rock into _____.
2. Extreme heat and pressure changes any kind of rock into _____.
3. What is the **rock cycle**?

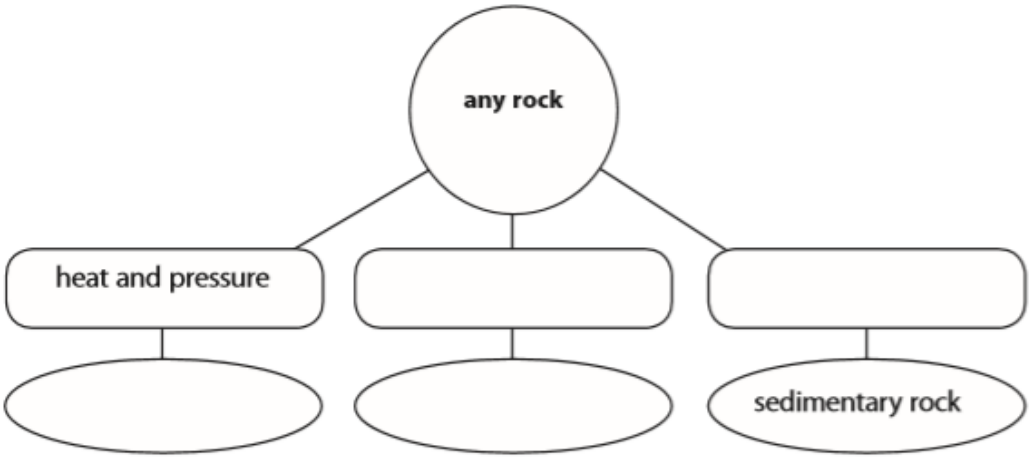
_____

_____

ORGANIZE IDEAS

As you read Chapter 3, complete the rock cycle chart.

HOW ROCKS CHANGE



STRATEGY FOCUS: SYNTHESIZE

Reread the ideas on page 17 and look at the diagram. Add what you already know about rocks. Make one statement that includes most of the information.

For you! Read!

CAREER EXPLORATIONS

Do you like learning about rocks?
Find out about these careers.

If you like...	then find out about:
studying the kinds of rocks in an area	geologists
drilling and digging through rocks	well drillers
studying the composition of rocks	geochemists

▼ **Geologists study rocks and changes in the surface of Earth.**

▼ **Well drillers dig deep to search for things like water and oil.**

◀ **Geochemists identify and study oil, coal, and gas fields.**