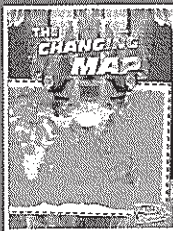


The Changing Map



Vocabulary

America, areas, coast, continent, Earth, earthquakes, east, Europe, jigsaw, masses, million, north, oceanic, plates, puzzle, scientists, slab, south, tectonic, west

Have students suggest other words containing the same sound. Underline the letters that make each sound. The students may suggest words with letter patterns other than those listed above. Identify the different ways each sound can be represented.

High Frequency Words

apart, because, called, changed, formed, large, movement, number, showing, slowly, small, split, started, taken

Write the high frequency words on cards. Have students sort cards into two piles: words with prefixes and suffixes, and base words. What other prefixes and suffixes do you know? Record students' suggestions. Build word sums by adding prefixes and suffixes to the base words, e.g. large + est = largest, number + s = numbers.

During Reading

Vocabulary in Context

Write the words in the vocabulary box on cards. Randomly place the high frequency word cards and vocabulary word cards onto a table. Ask students to select the technical/key words that they predict would be in the text.

Have students use the familiar words in sentences to show their understanding of the meaning.

Highlight the unfamiliar words. After reading, have them define the unfamiliar words based on their reading and the glossary definitions.

Checking for Meaning

Literal:

How many continents were on Earth 200 million years ago? How many are there now? (p.11, p.4)

Name the seven continents. (p.4–p.5)

What are tectonic, continental and oceanic plates? (p.6–p.7)

What causes land masses to split and move? (p.6)

Are the continents still moving today? Why? (p.22)

Inferential:

What could have caused Pangaea to split apart?

If Pangaea had not split apart, what would the world map look like today?

Make sure students understand the difference between literal and inferential information.

Response:

What do you think the Earth could look like in 100 million years?

How do you think scientists know that the Earth has changed?

Grammatical Patterns

Make sure students understand the following components of an explanation:

- Identifying statement about what is to be explained: *This is a map of the Earth today.* (p.4)
- Series of events explaining the phenomenon: *The land masses on Earth have moved because they are not fixed in one place.* (p.6) *By this time, Pangaea had split into two large continents.* (p.15)
- Concluding statement: *A map of the Earth may look very different in 100 million years from today.* (p.22)
- Use of general nouns: *place* (p.6), *years* (p.9), *map* (p.10)
- Use of technical language: *continents* (p.4), *land masses* (p.5), *oceanic plates* (p.7)
- Use of timeless present tense: *This movement can cause earthquakes or form mountain ranges.* (p.9)
- Use of adverbial phrases of time: *... over millions of years.* (p.5) *When these areas of land began to split apart, ...* (p.13)
- Use of adverbial clauses of reason: *... because they are not fixed in one place* (p.6)
- Use of noun groups to build information: *the land that made up Pangaea* (p.12), *the seven continents* (p.18)

Fluency / Punctuation Patterns

Model reading a lead-in statement as one group of words followed by a list, pausing between each name on the list. *Gondwanaland split into the land masses we know as: South America ...* (p.18) Ask, "Did you hear how I read the lead-in statement as one group of words? Did you hear how I paused between each name?" Have students echo your reading. Ask them to read page 19 fluently, with appropriate pausing.

These punctuation patterns occur in the text:

- A capital letter is used for *Earth* when it is a proper noun (p.4), and for the names of countries *South America* (p.21)

- Commas separate adverbial phrases and connectives. *If you look at a map of the Earth today, ...* (p.20)
- A colon precedes words and statements in a list (pp.15, 18, 19)

Critical Literacy

What information in the book did you already know?

What new information did you learn from the book?

What questions about the changing Earth does this book answer?

Linking Visual and Written

Look at the backgrounds on each page. How does the background connect with the written text?

Look back at the maps on pages 10 and 11, and pages 12 and 13. In your own words, explain how the map of the world changed between these two maps.

After Reading

Have students draw a visual timeline of maps to show their understanding of the way the Earth has changed from 200 million years ago to the present day.

Ask students to draw what they think the world might look like in the future.

Activities

Students will:

- use technical vocabulary to complete a cloze activity
- add suffixes to base words to fill the gaps in sentences
- find and record words containing a particular sound
- match parts of sentences to make statements of cause and effect, and write glossary definitions.

Comprehension (meaning) Vocabulary (structure) Phonics (visual) Writing (structure)

