section 2

# Relative Ages of Rocks

as you read

## What You'll Learn

- **Describe** methods used to assign relative ages to rock layers.
- **Interpret** gaps in the rock record.
- **Give** an example of how rock layers can be correlated with other rock layers.

## Why It's Important

Being able to determine the age of rock layers is important in trying to understand a history of Earth.

**Review Vocabulary**

**sedimentary rock:** rock formed when sediments are cemented and compacted or when minerals are precipitated from solution

**New Vocabulary**

- principle of superposition
- relative age
- unconformity

## Superposition

Imagine that you are walking to your favorite store and you happen to notice an interesting car go by. You're not sure what kind it is, but you remember that you read an article about it. You decide to look it up. At home you have a stack of magazines from the past year, as seen in **Figure 11.**

You know that the article you're thinking of came out in the January edition, so it must be near the bottom of the pile. As you dig downward, you find magazines from March, then February. January must be next. How did you know that the January issue of the magazine would be on the bottom? To find the older edition under newer ones, you applied the principle of superposition.

**Oldest Rocks on the Bottom** According to the **principle of superposition,** in undisturbed layers of rock, the oldest rocks are on the bottom and the rocks become progressively younger toward the top. Why is this the case?

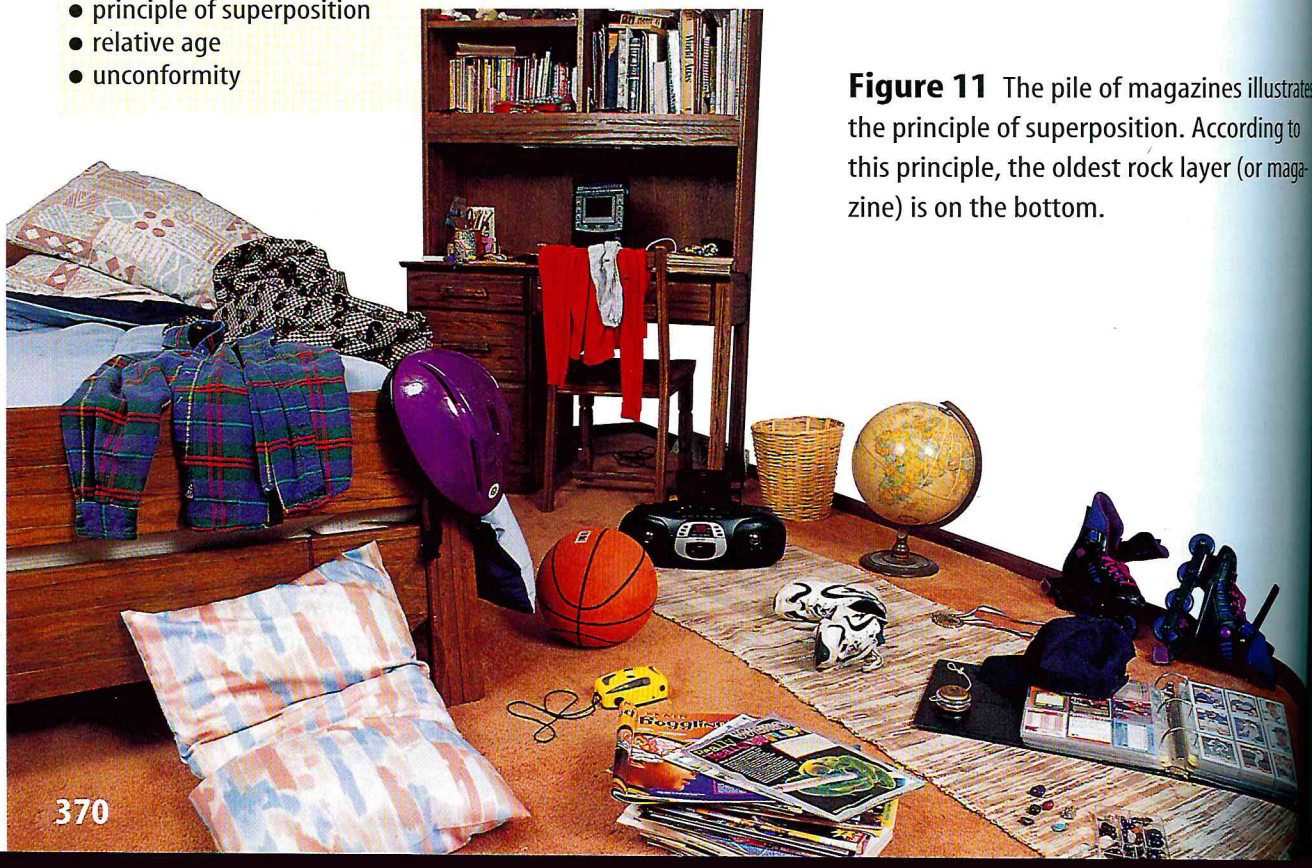

**Figure 11** The pile of magazines illustrates the principle of superposition. According to this principle, the oldest rock layer (or magazine) is on the bottom.