

## Comment on a World in Process

### Heraclitus

One of the basic principles of this course emphasizes the constant changing world around us. This commentary could be incorporated into a study of ancient civilizations, or if the school curriculum does not contain that study, into an early science class. It will demonstrate that the idea of continual change had its beginning long ago. As an aside, you may wish to ask the students Heraclitus' age at his death. You could begin the class by asking if anyone could identify Heraclitus.

Heraclitus, an early Greek philosopher (approximately 540-480 BC) lived in Ephesus. He challenged the monist philosophy of the day that speculated that everything around us was made from one element; air, water, or some mysterious substance. Instead he demonstrated that even visible change took place constantly. (Water evaporated, ice melted, things burned, etc.) He extended this belief to the sub-microscopic, contending everything continually changed. He stated this belief thus, "Nothing is, everything is becoming." He also believed if you pointed at an object like a chair, called it a chair, the moment the words were out of your mouth, the object had changed. He knew nothing about the atomic theory, but essentially, he theorized correctly.

Heraclitus also pointed out that inside of a seed existed the beginnings of a plant. When we planted the seed, we did not destroy it, but rather induced it to dramatically change.

This brings us to the last point. Heraclitus reportedly said "You cannot walk through the same stream twice." Ask the class what they think this means. The most obvious, the water has changed, but less obviously, the sediment has changed, the bank shrinks and grows, aquatic life moves on, etc.

What about traveling the same road? Taking the same class? Eating the same food?

What about you? Are you the same as yesterday? Will you be different tomorrow?