



# Technology: 750 B.C.

## Qanats

Because much of their country has little or no rainfall, Iranians have relied on a system of collecting and transporting water that was developed more than 2,500 years ago. The ancient Iranians, known as Persians, dug 30-to-100-foot shafts at the feet of mountains to tap into the water table. They built underground tunnels called *qanats* (KAH•NAHTS) that followed the slope of the land. These *qanats* collect water that seeps into the ground from melting snow and from rivers and streams. Although they are expensive to build and difficult to maintain, the *qanats* carry water to villages as much as 50 miles away for drinking and irrigating fields. They supply more than 75 percent of Iran's water.

**1** At the base of a mountain range, melting snow and rainwater collect underground on top of a layer of solid rock. The water table slopes downward farther and farther from the surface.

**2** Workers dig a well as deep as 100 feet to reach the water table. This is called the mother well.

**3** Shafts are dug at regular intervals so that villages can draw water and workers can maintain the tunnel.

**4** Workers build a shaft and haul out soil. Then they use stone, soil, and existing mineral and salt deposits to line the tunnel.

### THINKING



#### 1. Drawing Conclusions

What is a drawback of the *qanat* system?

#### 2. Recognizing Effects

How would a drought affect the *qanat* system?