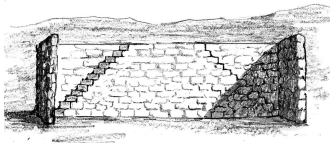
The Miraculous Sign of the Sundial Project

2 Kings 20; 21

Isaiah told Hezekiah that he would die soon. Hezekiah did not accept this but wept and prayed, reminding the Lord that he had continually tried to follow Him. The Lord heard his prayers and told Isaiah to tell Hezekiah that he would live. Hezekiah asked for a sign that this was true.

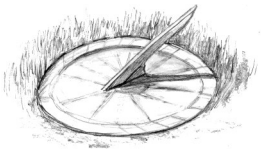
The Lord gave Hezekiah a miraculous sign. The Heavenly Doctrine tells us that the Lord used signs to show His Divine power, and to strengthen belief in Him. The Heavenly Doctrine tells us that the miraculous sign of the sundial represented Hezekiah's death being turned back.



Before clocks were invented in the 13th century, people did not reliably know the time. Today we count time by fractions of a second, and rely on watches for the time whenever we need it.

In ancient times, people measured time by using the sun and the moon. The first sundials were sticks or large stones set upright to cast a clear shadow on the ground. People looked at the direction shadow a pointer (or *gnomon*) cast on a scale of measurement. During Hezekiah's reign scholars believe that people recorded the sun's movement on a device called the "steps of Ahaz." People told the time by counting the number of steps in light or shadow.

Over time, people developed increasingly accurate sundials to tell the time of day. As the earth turns and rotates around the sun, the sunlight's angle changes and affects how objects cast shadows. The gnomon's shadow moves across a sundial's face through the day. By reading where the shadow falls on the sundial people can tell the time of day. You may have seen a modern sundial that looks like this.



Set up your own primitive sundial on a sunny day and observe the sun's movement over several hours.

1. Put a paper plate or piece of paper in a dry sunny place on level ground outside.
2. Stick a pencil through the center of the plate or paper into the ground.
3. Use a pencil to record the length and direction of the shadow on your base.
4. Write the time next to it.
5. Return to the paper at regular intervals—either half-hourly or hourly for several hours. Each time, record the shadow's direction, length and the time.
6. Note the changes of shadow size and direction.

To do this experiment indoors, choose a large sunny window and put a piece of paper on a flat surface. Use an upright weighted object as the gnomon. Remember that the sun will not stay in the same window all day—choose your window wisely!

Reflect on the miracle that the Lord performed for Hezekiah. By what means might the sun have moved backwards on the steps of Ahaz?

