

SCIENCE 307 TIMES AND SEASONS NEW EDITION

A Teacher's Guide pull-out supplement is positioned in the center of this unit.

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Learn with our friends:





When you see me, I will help your teacher explain the exciting things you are expected to do.

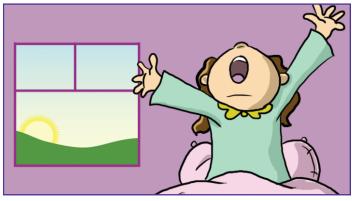


When you do actions with me, you will learn how to write, draw, match words, read, and much more.



You and I will learn about matching words, listening, drawing, and other fun things in your lessons.

TIMES AND SEASONS









When you wake up in the morning, you notice that it soon becomes lighter outside. The sun begins to shine. It gets brighter as the day goes on. Later in the day, the sun begins to go lower in the sky. The sky gets darker as the sun disappears from view. Finally, it becomes night and it is dark outside. Sometime in the night, you go to sleep. Your waking day ends. You have experienced the times of day and night. Tomorrow, you will start a new day again. What happens to cause day and night? How do we measure the times of day and night?

The sun does not come up at the same time as each day passes. You notice that during the winter, the sun comes up later in the day and goes earlier. During the down You experience the times of day and night SUMMER, it comes up earlier

and goes down later. Why? What causes this to happen? What causes the seasons of the year, like summer and winter?

In this LIFEPAC® you will learn the answers to the above questions. You will study the times of the day and seasons of the year. Our times and seasons are part of God's wonderful creation. You will learn that God has given order to His creation that helps us to have the times of the day and seasons of the year.



Read these objectives. They tell you what you should be able to do when you have successfully completed this LIFEPAC.

When you have finished this LIFEPAC, you should be able to:

- 1. Describe two main ways that the earth moves.
- 2. Explain what causes the day and night on earth.
- 3. Describe how time is measured in hours.
- 4. Explain how there are time zones on the earth.
- 5. Explain how time is measured in weeks, months, and years.
- 6. Name the four seasons of the year.
- 7. Describe how the earth tilts.
- 8. Explain the cause of the four seasons of the year on earth.



- **autumn** (ôt' əm). The season between summer and winter. Also known as "fall."
- **axis** (ak' sis). An imaginary line that runs from the North Pole to South Pole through the center of the earth.
- calendar (kal' ən dər). A way to keep track of days, weeks, months, and years.
- **counter-clockwise** (kount' ər klök' wīz). The direction opposite the movement of the hands on a clock.
- **equator** (i kwat' ər). An imaginary line drawn around the earth halfway between the North and South Poles.
- **globe** (glob). A small model of the earth. It is in the shape of a ball with a map of the earth on it.
- **Hemisphere** (hem' ə sfîr). A half of the earth; for example the northern half above the equator or the southern half below the equator.
- **imaginary** (i maj' ə ner' e). A mental picture or idea. It is not real, but it can help a person explain something else that is real.
- **model** (mod' əl). A small or simple representation of something else that is larger or more complex.

orderly ($\hat{o}rd'$ $\hat{e}r$ |e|). Well-arranged; neat, tidy.

revolve (ri volv'). To move in a path around something.

rotate (ro' tat). To spin about a point or an axis.

rotation ($r\bar{o}$ $t\bar{a}'$ shən). The movement of turning around on an axis.

tilt (tilt). To tip; to not be straight up and down. **zone** (zon). A part of something.

These new words will appear in **boldface** (darker print) the first time they are used in this LIFEPAC.

ēā əō ăūū iû äüôã'

Pronunciation Key: hat, age, care, fär; let, equal, tûrm; it, ice; hot, open, order; oil; out; cup, put, rüle; child; long; thin; /TH/ for then; /zh/ for measure; $/\partial/$ represents $/\partial/$ in about, $/\partial/$ in taken, $/\partial/$ in pencil, $/\partial/$ in lemon, and $/\partial/$ in circus.

I. HOW THE EARTH MOVES

It may seem strange, but we have day, night, and seasons because the earth moves. When you stand still in a place outside for awhile, it seems as if the earth does not move. Yet, as you stand there, the earth is moving! In fact, it is moving very fast, and you are moving with it.



The earth moves while you are standing still 4 (four)