

SCIENCE 307

TIMES AND SEASONS

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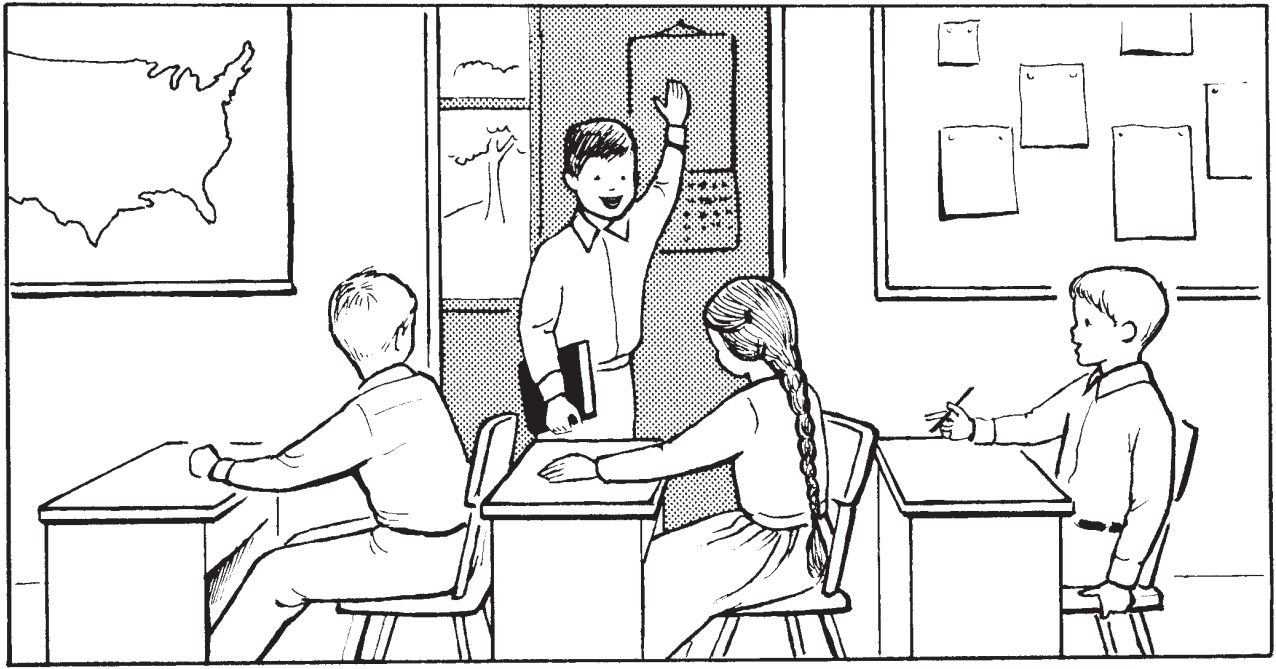
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THE EARTH ROTATES

Tom ran into his classroom very excitedly. "My grandmother called us from France yesterday. She lives there while my grandfather helps to build an important bridge. When she called, we were having lunch; but grandmother said she had just finished supper. I don't understand. Isn't it the same time every place?"

Miss Forest wanted all of the students to hear Tom's news. Not often did anyone have a phone call from another country. After Tom told his story to the class, everyone wondered about the difference in time between France and their town.

"I have a LIGHTUNIT here that may help you to understand about time," said Miss Forest. "If you do the activities and read the stories, you will know more about time on the earth. You will use a **globe** to help you learn about the earth. A globe is a **model** of the earth."



Find out about the earth.



You will need these things:

bright flashlight

globe

tape



Follow these directions and answer these questions. Put a check in the box when each step is completed.

- ☐ 1. Pretend that the globe is the earth. Pretend that the flashlight is the sun. The room must be dark. (Maybe you could do this study in a closet or basement.)
- ☐ 2. Find where you live on the globe. Put some tape on the spot.
- ☐ 3. Shine the flashlight on your town.

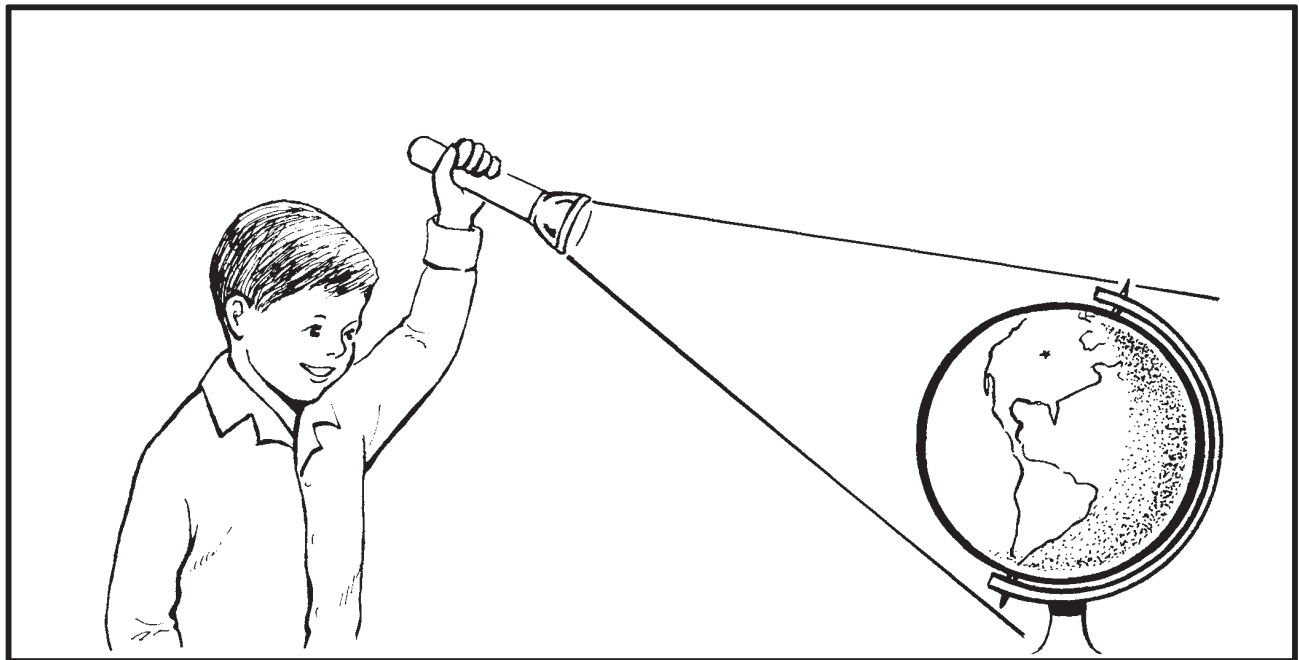
☐ 4. Turn the globe halfway around.

1.1 Is your home in the light or dark now? _____

☐ 5. Keep turning the globe until your home is back where you started. The globe has turned around completely one time.

1.2 Is your home in the light or dark now? _____

1.3 When your home is in the light, what are some other places on the globe that are in the light?



Your Town

- o1.4 What are some places on the globe that are dark when your town is light?

_____	_____
_____	_____
_____	_____

- o1.5 When your home is in the dark, what are some places on the globe that are in the light?

_____	_____
_____	_____
_____	_____

- 1.6 Are those places in 1.5 always on the other side of the globe from your town? _____

The flashlight is like the sun. The globe is like the earth. When the sun is shining on your town, you have day. When the earth turns away from the sun into the dark, your town has night.

All the earth cannot have day at once. All the earth cannot have night at once. Half the earth has day while at the same time the other half has night. Use the flashlight in a dark room to prove this idea to yourself.



Answer the questions using the words *day* and *night*.

1.7 What do you call the light part of the day?

1.8 What do you call the dark part of the day?

1.9 What do you call the time when the sun shines on your side of the earth? _____

1.10 What do you call the time when it is dark on your side of the earth? _____



Complete this activity.

1.11 Do you know why we call the light *day* and the darkness *night*? Do you know why we call both day and night one day? Because God did. Read Genesis 1:3 through 5 to someone.

