

4.22 Sun and moon

Topic: Measurement

Subtopic: Time

Activity type/skill: Information transfer

Literacy focus: Vocabulary

Objective

- Introduce target vocabulary in a science context.

What you need

- Student worksheet (see next page)
- [Audio track 4.22](#)

What to do

1. Read the article with the students. Give the graphics special attention.
2. Play track 4.22 (Track 7 for this topic) and have the students listen to the track and read at the same time.
3. Discuss the time concepts covered in the text (day and night, what a year is, what a month is).

Extending the activity

- You will find valuable material on the web for teaching time concepts as the subject seems to lend itself to interactive activities – try <http://teacher.scholastic.com/fieldtrp/math/calmath.htm>

Activity twenty-two

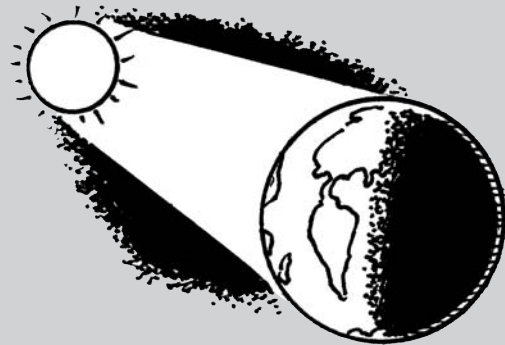


Track 7

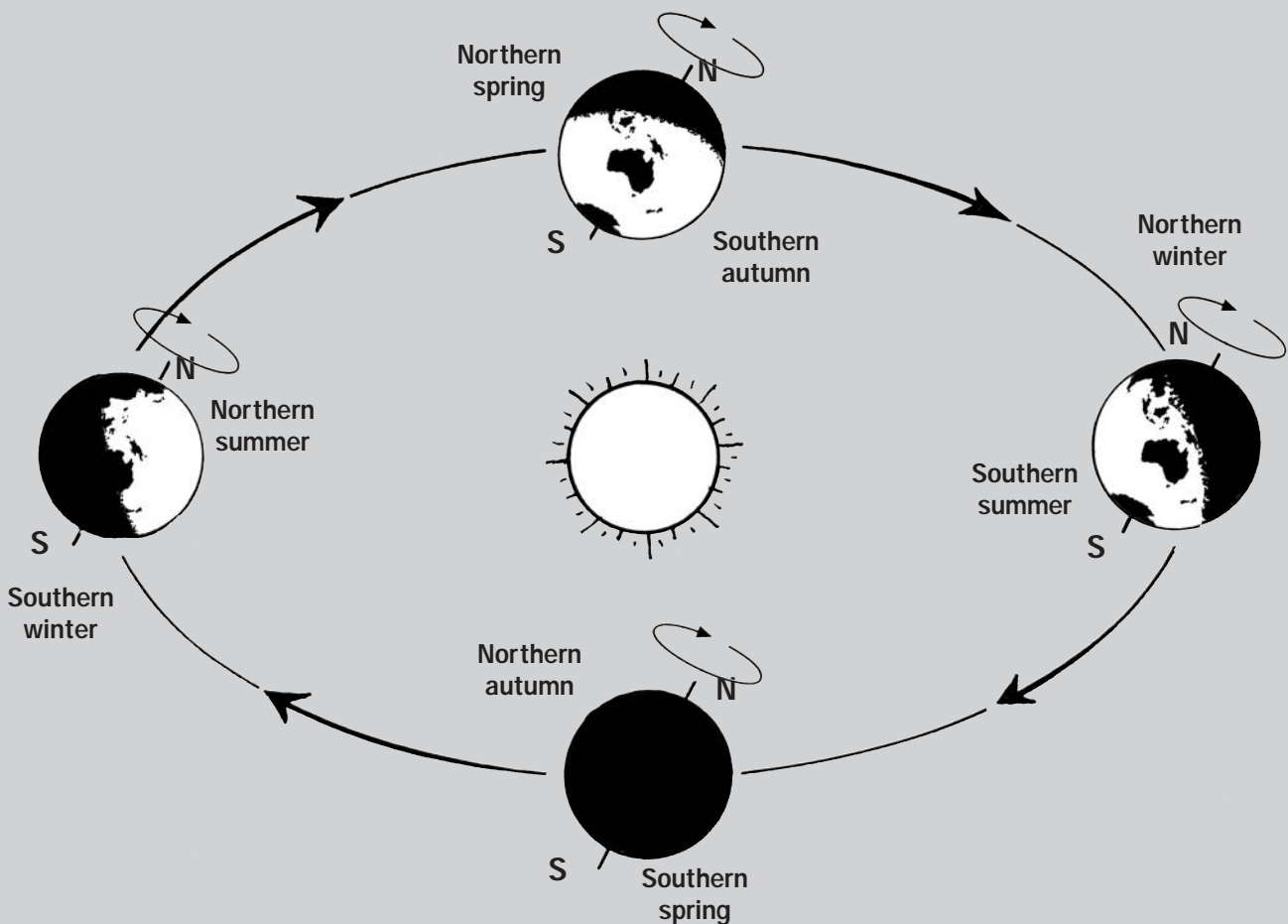
Time

The sun is at the centre of our solar system and it gives us day and night. At any time, one half of the earth faces the sun and is lit by the sun's rays. Now, on this side of the world it is daytime. On the opposite side of the world where the light of the sun does not reach, it is night-time.

The earth spins slowly all the time. It takes a whole day to make a complete turn. Long ago, people decided to divide this day into 24 hours, the hours into 60 minutes and those minutes into 60 seconds.



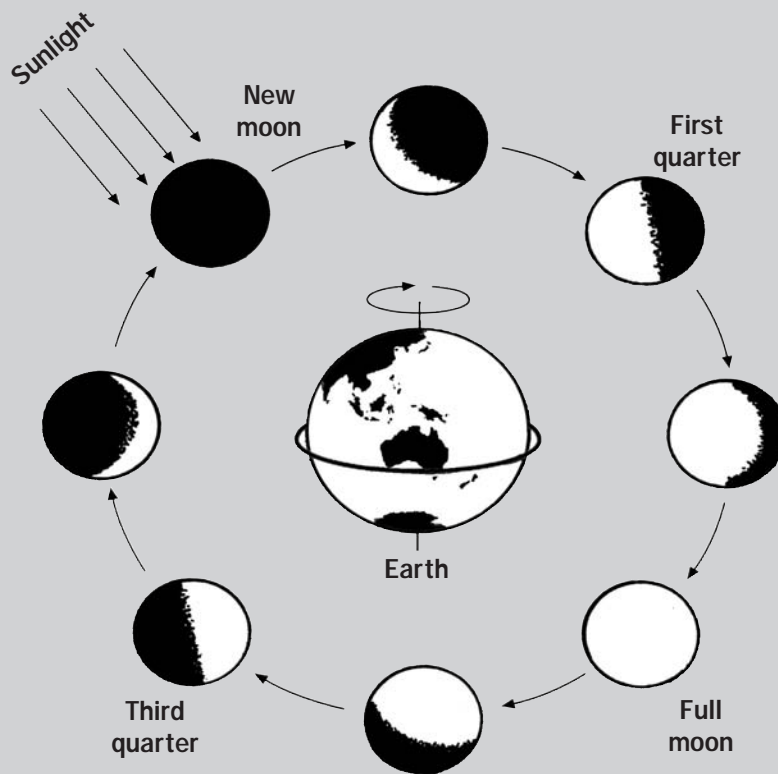
At the same time as the earth is spinning through day and night it also moves round the sun. The time this takes is one year.



Activity twenty-two

When people began to make the first calendars they noticed that the moon changed into a full moon in about 15 days and back into a new moon in another 15. This time is called one lunar month.

During a lunar month the moon seems to change its shape as the sun lights different parts of its surface.



The Ancient Egyptians kept records of the changes of the seasons and the stars in the sky. They worked out that a solar year is about 365 days, and that 12 lunar months are about the same length of time.

Many civilisations have based their calendars on the moon. The Chinese New Year and the Christian Easter are based on lunar calendars. The Chinese and Islamic calendars are lunar calendars.

The calendar most countries use today was created in the 15th century. It is called the Gregorian calendar. It has leap years and leap centuries so the calendar year accurately matches the Earth's orbit around the sun.

Glossary

solar: to do with the sun

lunar: to do with the moon