Sun, Earth, Moon
Journey through the Solar System

**time**
55 minutes

**learning outcomes**
To:
- practise fine motor skills
- learn that in the Solar System the Earth revolves around the Sun
- learn that the Moon revolves around the Earth
- learn that the Sun is a star

**end product**
- mobile of the Sun, Earth, and Moon

**materials needed**
- 24 wooden skewers
- 24 cocktail sticks
- colouring pencils
- felt-tip pens
- scissors
- string
- stiff card
- A4 paper
- sheet of A2 paper
- sticky tape
- embroidery needles

---

**Preparation**

For the activity **Solar System memory game** make 12 copies of the memory game (cut-out sheet) on stiff card. For the activity **The Sun mobile** you will need colouring pencils, felt-pens, and wax crayons.

**What do you already know?** 10 min.

Provide each child with a sheet of blank A4 paper and some colouring pencils. On the board, write the words Moon, Sun, and Earth, and draw them underneath. This teaches word recognition. Encourage the children to draw the Moon, Sun, and Earth and to write any words associated with them. Discuss briefly what the children have drawn/written. Write their ideas on a sheet of A2 paper and display this in the classroom. Explain to the children that they can add to this whenever they like, either in words or pictures.

The children explore how the Moon revolves around the Earth, and the Earth around the Sun.

**Solar System memory game** 16 min

The children are going to play the memory game. This will teach them the differences between the Sun, Earth, and Moon. They will need this knowledge for the activity **The Sun mobile**. Before starting the game, encourage the children to look at all the cards from the memory game from the cut-out sheet. Explain that it is much hotter on the Sun than on Earth.

Can the children see that the temperature on the Moon can range from very cold to very hot? Explain that the Sun is more than a hundred times wider than the Earth.
Explain how the memory game works. The children cut out the cards and play the game in pairs. Afterwards, discuss what the children learned from the game.

**The revolving Earth 10 min.**

Draw a picture of the Earth in the middle of the board. Explain that the Moon revolves around the Earth, and then add it to the drawing. Now explain that both the Earth and the Moon revolve around the Sun. Draw this on the board as well. Invite three children to come to the front of the class. Explain that child 1 is the Earth, child 2 is the Moon and child 3 is the Sun. Encourage the children to enact the movement of the Moon around the Earth and the spinning of the Earth on its axis whilst it revolves around the Sun. Explain that they are going to make a mobile showing this.

**The Sun mobile 20 min.**

Now explain how to make the mobile shown in task 1 of the activity sheet. Talk through the instructions together. The wooden skewers are used for the top bar. Help the children to tie the string to the wooden skewers. Using the drawing, demonstrate to the children how to put the rest of the mobile together. Hang the mobiles in the classroom. Check that the mobiles they have made work properly. Does the Earth revolve around the Sun and the Moon around the Earth?

Encourage the children to explain what they have learnt about the Solar System. Do they know now that in the Solar System the Earth revolves around the Sun and the Moon revolves around the Earth?

---

**Good to know.**

The Solar System comprises several heavenly bodies, with a central star surrounded by planets and dwarf planets such as Pluto. It also contains the moons of the planets and any planetoids (minor planets) and comets. In this lesson we are only dealing with the Sun, the Earth and the Moon.
1. **The Sun mobile**

**What do you need?**

- colouring pencils
- felt-tip pens
- scissors
- string
- sticky tape
- embroidery needle or paper punch
- 1 cocktail stick
- 1 wooden skewer

**What are you going to do?**

1. Colour the pages for the Sun mobile on the cut-out sheet.
2. Cut them out.
3. Use the paper punch or embroidery needle to prick a hole through the dot on the Sun and the Earth.
4. Thread a piece of string through each hole.
5. Tie a knot in the string.
6. Tie a piece of string in the middle of the wooden skewer.
7. Tie the Sun to one end of the wooden skewer.
8. Tie the Earth to the other end of the wooden skewer. Watch your teacher showing you how to do it. You can also look at the drawing below.
9. Use sticky tape to fix the Moon to the cocktail stick.
10. Use sticky tape to fix the other end of the cocktail stick to the Earth.
Journey through the Solar System

Lesson 21

The Sun
- Diameter: 14 million km
- Temperature: 5500°C

The Earth
- Diameter: 12,750 km
- Temperature: 5500°C

The Moon
- Diameter: 3500 km
- Temperature: -153 to 127°C

- Diameter: 3 thousand km
- Temperature: -153 to 127°C