



# Lots and lots of stars!

## Looking at the stars

### time

45 minutes.

### learning outcomes

To:

- know that stars give off light
- know that you can see the stars at night (if it is not cloudy)
- know that the Sun is a star
- know that there are lots and lots of stars
- practise counting
- practise writing numbers and reading them

### end product

- a painting of a starry sky

### materials required

- 24 splatter painting screens or plastic combs or wooden ice lolly sticks
- 24 toothbrushes
- 3 transparent containers
- marbles (enough to fill two transparent containers)
- A4 paper
- different colours of paint



## How many stars are there? 15 min.

Sit in a circle with the children. Show five marbles. Ask who thinks there are more stars than these marbles? Count the marbles and put them in a transparent container. Explain that there are more than five stars. Are there more stars than there are children in the class? Count the number of children and put an equal number of marbles in the second transparent container. Explain that there are more stars than there are children in the class. Now fill the third transparent container right to the top with marbles. Do the children think that there are more stars than would fit in the third container? Explain that there are so many stars that we need computers to count how many there are.

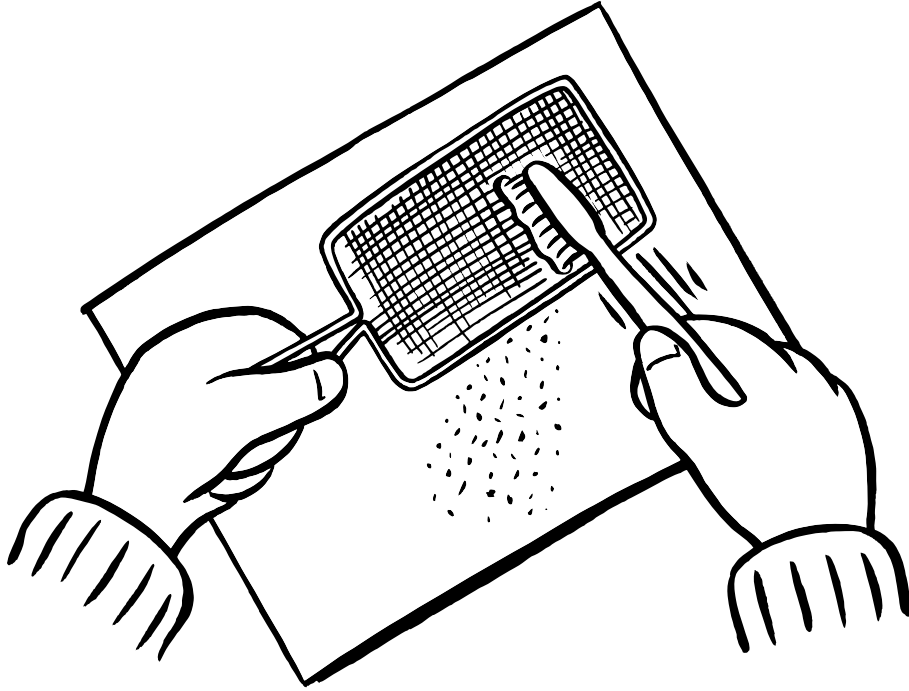
Ask the following questions: 'Have you ever seen the stars? What did they look like? Were there a lot of them? Do stars give light? When do you usually see the stars? Is the Sun a star too?' Show the discussion sheet of the starry sky. What can the children see in this picture? Explain that you can see the stars most clearly at night. Stars give light. The Sun is a star as well. The Sun gives off so much light that we have light during the day. The light is so bright then that we can't see the other stars.



The children discover that there are lots of stars in the universe.

### Good to know.

The Sun is our closest star. The other stars are so far away that they give us much less light. There are more stars in the universe than there are grains of sand on Earth!



### **Making a starry sky** 15 min.

The children paint a sheet of A4 paper to match the colour of the night. Let them choose what colour they want this to be. When the paint is dry, the children can make stars. Give each child a splatter painting screen, or comb or lolly stick and a toothbrush. Let the children choose what colour(s) they want to paint the stars. Explain that the real stars also come in different colours. Dipping the toothbrush in the paint and running it across the screen makes lots of tiny spots on the paper. Alternatively, the toothbrush can be moved from side to side across the teeth of a comb, or, with the toothbrush bristles facing downwards, pulling a lolly stick towards them across the bristles will produce a similar effect. These spots are the stars.



### **Discuss the starry sky** 5 min.

Talk about what the children have learned. Encourage a number of children to show what they have made. Reiterate what stars are, when you see them and how many there are in the universe.



### **Counting stars** 10 min.

The worksheet contains drawings of stars. Hand out the worksheet to the children who are able to count and write numbers themselves. With the rest of the children, count per block how many stars are shown on the worksheet. Encourage all the children to draw the correct number of stars by the numbers.



# 13 discussion sheet



