

Rainbows

Level: A1.1, A1.2

Age: 6-10

Organization: pairs, whole class, individual

Aims: To investigate the order of colors in a rainbow; to carry out a simple science experiment by hypothesizing, observing, comparing and reporting; to identify and name the colors in a rainbow.

Language focus: numbers 1-7, colors, *What's...?*

Materials: *Essential:* a glass of water, a piece of plain white paper, a sunny window

Procedure

1. Ask the children to tell you or guess how many colors there are in a rainbow. Write numbers 1-7 in a list on the board. Pre-teach the color *indigo* (a blend of blue and purple) and write this word next to 6 on the board.
2. Divide the class into pairs.
3. Ask the children to guess the order of the other colors in a rainbow and write a list with their partner. Demonstrate the activity before they begin, e.g. T: *What's color number 1?* P1 (*I think it's orange.* P2: *No, it isn't. It's yellow.*
4. Ask the children to report back and record their guesses on the board. Hold up the glass of water and piece of white paper and say *Now let's find out the order of colors in a rainbow.* Walk over to a sunny window and hold the glass of water over the white paper. Change the angle of the glass until the sun shines through leaving a 'rainbow' on the paper.
5. Invite groups of children to come and have a look at the 'rainbow' and identify the colors in turn. They compare the order of colors with their list and the guesses on the board. (The order is red, orange, yellow, green, blue, indigo, purple). Children then draw and color a rainbow, labeling the colors, based on their observations.

Comments and Suggestions

- This activity only works if there is a sunny window in the classroom! The angle that you need to hold the glass and paper for the 'rainbow' to appear varies depending on the time of day and the height of the sun in the sky. Don't give up if you can't make it work at first!
- As a follow-up, you may like to teach children the well-known song *I can sing a rainbow*. As an initial listening task, you can ask children to identify the colors in the song that are wrong.
- With older children, it may be appropriate to do further work investigating the properties of light and color and the color spectrum.