



Keeping the classroom aired

Duration	4-5 hours
Time of year	Any
Place	Classroom
Materials	Notebook, pens, carbon dioxide monitor
Aims	<ul style="list-style-type: none">● To highlight the importance of ventilation and the energy efficiency of ventilation systems
Methods	Games, discussion, brainstorming

DISCUSSION

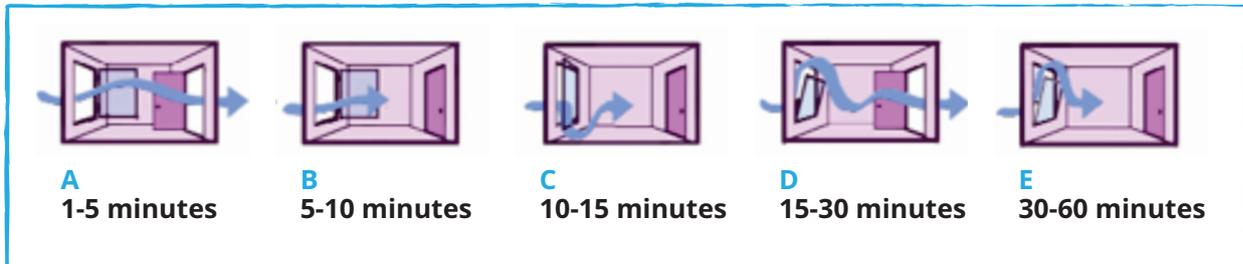
Windows and ventilation

- ▶ Before the activities, it is useful to have a general discussion with the children about the quality of the air in the classroom. Ask the children whether they consider it good or bad. Do any of the children suffer from regular headaches? How many times are the windows opened during the day? When are they opened?
- ▶ Discuss what good ventilation and bad ventilation mean. Ask the children to have a good look at the windows in the classroom. They can do a simple experiment to see how tightly the window fits in its frame. Ask them to open the window, lay a piece of paper on the frame, then close the window again. If they can pull the paper out with the window closed, then the windows do not fit properly. Ask them if they can see why. Are the frames rotten or warped? Ask them to check several other windows in the school building and record their findings. Once the children have learnt more about ventilation, they can design posters and put them up throughout the school in order to share the information. In addition, a team of children could volunteer to check all the windows in the school and prepare a report for the school management. If the windows fit appropriately, the report could indicate whether there is adequate ventilation to ensure good working conditions. The children could repeat the exercise at home and write a report for their parents (although parents should be consulted in advance).
- ▶ Use the following questions as a basis for discussion:
 - Which windows in the school building are faulty?
 - Is there any difference between south-facing windows and north-facing windows?



**GROUP WORK****Window checking**

- ▶ Show the children the pictures below, which illustrate the amount of time needed for correct natural ventilation that allows for a complete change of air in a room.



Explain that the A scenario is ventilation with window and door wide open; B is ventilation with only the windows wide open; C is ventilation with windows slightly ajar; D is ventilation with windows slightly ajar and the door wide open; and E is ventilation only the windows slightly ajar.

- ▶ Ask the children which ventilation scheme (A, B, C, D or E) is used in their classroom.
 - Are the windows and doors left open for a sufficient amount of time?
- ▶ Divide the children into teams to check all the windows in each room in the school.
 - Suggest that they write a report for the school management on the amount of time required to ventilate each classroom in the school.

