Instructions

Puzzle/quiz

Students find out that bacteria live in very varied places – their task is to guess where the bacteria cultured on various Petri dishes come from.

Necessary materials:

- slides of Petri dishes shown in the multimedia presentation (or photo prints)
- several sets of cards with drawings – for each group

Instructions:

Distribute cards with drawings to each of the groups. The drawings represent places where bacteria live. Then present slides showing Petri dishes – special plastic or glass vessels with bacteria cultured from various places. Alternatively, you can give out photo prints of Petri dishes.

The students' task is to guess where the bacteria cultured on each Petri dish come from, and to match them with the appropriate drawings.

After the exercise, check the answers proposed by students together with them –- show slides with answers.

Manual exercise

Students build model bacteria from plasticine and, through the exercise, observe and understand the principle of multiplication of bacteria.

Multiplication of bacteria - instructions

Materials needed:

- a sheet of A4 (letter size) paper for each student
- a piece of plasticine for each student
- a ruler for each student (you can ask students to use their own rulers, but if you do, make sure that there are some spare rulers in the classroom as well)

Instructions:

Give students a set consisting of a sheet of paper, a piece of plasticine and a ruler. The students' task is, firstly, to make two model bacteria in the shape of a cylinder from plasticine (ask them not to use the whole piece of plasticine for this purpose). Next, they cut each of these bacteria into two parts with a ruler, stick a small amount of plasticine onto each of the new parts (bacteria grow) and then again cut each of the new bacteria into a further two parts (bacteria divide/multiply). Students stick an additional piece of plasticine onto the newly formed bacteria and then divide them in two again with a ruler. Students can repeat this process for as long as there is sufficient material. The sheet of paper simply serves as a protective surface in this exercise (to prevent tables from getting dirty).