

HOW DO WE SAMPLE AND ANALYSE BIOAEROSOLS?



RESOURCES

- 1 x PowerPoint** (Bioaerosol sampling and analysis)
- 1 x handout** (Different analysis methods)
- 2 x activity sheets** (Advantages and disadvantages of different sampling methods, Collect and analyse airborne bacteria and fungi using gravitation)



SUGGESTED SEQUENCE

- Go through PPT
- Give out activity sheet: **Advantages and disadvantages of different sampling methods**
- Give out handout: **Different analysis methods**
- Go back to PPT for Activity 3: **Design a poster**
- Give out activity sheet: **Collect and analyse airborne bacteria and fungi using gravitation**



OBJECTIVES AND LEARNING OUTCOMES

Introducing students to different methods for sampling and analysing bioaerosols and why this is important. These objectives are grouped according to Key Stages in the UK National Curriculum and are also internationally relevant.

KEY STAGES 3-4 (AGE 11-16)

Students will be able to:

- Understand the importance of bioaerosol quantification
- Understand the importance of and need for bioaerosol monitoring
- Explain the factors influencing the nature of bioaerosols
- Identify different sampling and analysis approaches to characterize and quantify bioaerosols
- Recognise the advantages and disadvantages of different sampling methods
- Understand key factors for planning a monitoring strategy to investigate bioaerosols in an environment