

WHAT ARE BIOLOGICAL PARTICLES (BIOAEROSOLS) AND WHERE DO THEY COME FROM?



RESOURCES

- 3 x handouts** (What are biological particles?, Where do bioaerosols come from? Indoor vs outdoor bioaerosols)
- 3 x activity sheets** (Metric Measurements, Grow your own microorganisms, Student Quiz)
- 2 x PowerPoints** (What are bioaerosols?, What is a microorganism?)



SUGGESTED SEQUENCE

- Give out handout: **What are biological particles?**
- Go through PPT: **What are bioaerosols?**, which includes YouTube links mentioned in the handout
- Give out activity sheet: **Metric Measurements**
- Go through PPT: **What is a microorganism?**
- Give out handout: **Where do bioaerosols come from?**
- Give out handout: **Indoor vs outdoor bioaerosols**
- Give out activity sheet: **Grow your own microorganisms**
- Go through **Student Quiz**



OBJECTIVES AND LEARNING OUTCOMES

Introducing students to **bioaerosols**, their sources, and the effects of dispersal and ventilation on levels of biological particles. These learning outcomes are grouped according to Key Stages in the UK National Curriculum, and are also internationally relevant.

KEY STAGES 1-2 (AGE 5-11)

Students will be able to:

- identify types of bioaerosols
- identify sources of bioaerosols
- understand what a microorganism is

KEY STAGES 3-4 (AGE 11-16)

Students will complete all learning outcomes for KS1-2 and be able to:

- understand the different size ranges of bioaerosols
- identify different types of microorganisms
- understand the role of ventilation in indoor bioaerosol exposure
- understand the role of size in bioaerosol dispersal
- be aware of the health effects of bioaerosols