Foundation Stage Scheme of Work

Year 8 Breathing, Respiration and Unicellular Organisms

14 Lessons

Aims: This unit of work is designed to introduce students to Breathing and Respiration, as well as linking these to Unicellular Organisms.

Links to KS4:

Chapter 1 Biology – Cells at Work, Living without Energy

Chapter 3 Biology – Investigating gas exchange

Chapter 4 Biology – Studying Pathogens

Key Skills	Literacy Links:	Numeracy Links:
 To develop an understanding of Breathing and Respiration. To develop an understanding of Unicellular Organisms. To develop practical skills in a Science labs. 	Key Words: oxygen, gas exchange, alveoli, aerobic, anaerobic Be able to read and use these keywords within Scientific situations both verbally and written.	Be able to measure and compare breathing rates and pulse rates.
Assessment	Cross-Curricular Links	
 Pink sheet teacher assessed activity – Comparing anaerobic respiration to aerobic respiration. 50 mark test which will focus on the following key areas: Two types of respiration, Breathing and respiratory system, Gas exchange in plants, Smoking and drugs, Types of microbe and Fermentation. 	 Food – Use of yeast to make bread rise. PE – Pulse and Breathing Rates 	
	SMSC opportunities and British values	

Opportunities for further learning

Homework for year 8 is set on a weekly basis. Below are a range of different activities which could be used throughout the unit.

- **Option 1:** Students could learn the equations for aerobic and anaerobic respiration.
- Option 2: Research Joseph Priestly and Lavoisier to learn how oxygen was discovered.
- **Option 3:** Produce an antismoking poster or factsheet.
- **Option 4:** Describe the structure of the respiratory system.
- **Option 5:** Research and present information about a microorganism.
- **Option 6:** Describe uses for fermentation.
- **Option 7:** Drawing a graph comparing breathing and heart rates of different students.
- **Option 8:** Compare different types of microorganism.