

For each lesson please follow the link to Oak National Academy and watch the video, complete any worksheets and exit quiz.

Year 9

Week 1 – SCIENCE – Biological systems and processes

COMMUNITY

Monday

Lesson 1 – Musculoskeletal system

This lesson looks at the different parts of the human skeleton, the functions of the skeleton and joints in the human body.

<https://classroom.thenational.academy/lessons/musculoskeletal-system-6tjkqt>

Tasks:

1. Watch the video of the lesson
2. Download the worksheet and complete the tasks
3. What have you learnt? Complete the exit quiz

Appreciation of the value of belonging to a community where people and animals can live in harmony, and being aware of the online community and the opportunities and challenges this presents.

Tuesday

Lesson 2- Muscles

This lesson will show you how to identify major muscle groups involved in common movements, describe how some of the muscular tissue in our organs work and understand how to measure the force of some of the skeletal muscles in the body.

<https://classroom.thenational.academy/lessons/muscles-64v68t>

Tasks:

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

Wednesday

Lesson 3 – The respiratory system

This lesson looks at the function and structures in the respiratory system. The lesson will look into how gases are absorbed from the alveoli into the bloodstream using diffusion. It will also look into explaining how alveoli are adapted for their function.

<https://classroom.thenational.academy/lessons/the-respiratory-system-ccvk2c>

Tasks:

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

Thursday

Lesson 4 – Aerobic respiration

This lesson goes through the word equation for respiration and explains the importance of respiration.

<https://classroom.thenational.academy/lessons/aerobic-respiration-crt64e>

Tasks:

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

Friday

Lesson 5 – Breathing

This lesson looks to explain the processes involved in breathing. It will compare the difference in lung volumes in different people and we will calculate means and identify the range in the data collected.

<https://classroom.thenational.academy/lessons/breathing-70v6ct>

Tasks:

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

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Year 9

Week 2 – SCIENCE – Biological systems and processes

COMMUNITY

Monday

Lesson 6 – The effects of exercise on respiration

This lesson looks at describing and explaining the effects of exercise on the respiratory system.

<https://classroom.thenational.academy/lessons/the-effects-of-exercise-on-respiration-cgrk6t>

Tasks:

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

Appreciation of the value of belonging to a community where people and animals can live in harmony, and being aware of the online community and the opportunities and challenges this presents.

Tuesday

Lesson 7 – Anaerobic respiration

This lesson goes through the word equation for anaerobic respiration, the importance of anaerobic respiration and then compares aerobic and anaerobic respiration

<https://classroom.thenational.academy/lessons/anaerobic-respiration-6cu3cc>

Tasks:

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

Wednesday

Lesson 8 – Review

Recall key terms, definitions and structures related to biological systems and processes. Use scientific language accurately to correct statements. Review and consolidate knowledge

<https://classroom.thenational.academy/lessons/review-one-c4r36c>

Tasks:

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

Thursday

Lesson 9 – DNA

In this lesson we will define the terms DNA, gene and chromosome and create a model of DNA

<https://classroom.thenational.academy/lessons/dna-74tkgd>

Lesson 10 – DNA case study: Franklin, Wilkins, Watson and Crick

In this lesson we will look at the scientists who contributed to the discovery of the structure of DNA

<https://classroom.thenational.academy/lessons/dna-case-study-franklin-wilkins-watson-and-crick-74u30r>

Tasks:

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

Friday

Lesson 10 – Inheritance

In this lesson we will look at how to use genetic terms correctly. We will draw simple Punnett squares to show inheritance. We will then determine the probability of offspring displaying a particular characteristic

<https://classroom.thenational.academy/lessons/inheritance-cngkit>

Tasks:

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz