

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

Year 8

Week 1 – SCIENCE – Plants and Photosynthesis

COMMUNITY

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.

Monday

Lesson 1 – Plant roots

This lesson recaps prior learning of plant cells and then describes the function of the root and root hair cells. We will then compare root hair cells to 'typical' plant cells and explain how the adaptations of the root are related to its function

<https://classroom.thenational.academy/lessons/plant-roots-70u38t>

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

Tuesday

Lesson 2 Photosynthesis

This lesson looks at the reactants and products of photosynthesis and how to write it as a word equation. We will then look at how you can test whether photosynthesis has occurred.

<https://classroom.thenational.academy/lessons/photosynthesis-64t3cc>

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 – Uses of glucose

In this lesson, you will learn about the 4 uses of the glucose produced during photosynthesis. We will then look at how to carry out an investigation to prove whether photosynthesis has taken place. In order to do this, we will firstly need to identify hazards and risks and suggest appropriate ways to reduce them then we will make observations and describe results in order to draw conclusions related to photosynthesis.

<https://classroom.thenational.academy/lessons/uses-of-glucose-60wkae>

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 – Rate of photosynthesis

This lesson will involve identifying factors to change, measure and control to test a hypothesis. We will then focus on how to draw conclusions from data collected and analyse graphs to identify limiting factors of photosynthesis

<https://classroom.thenational.academy/lessons/rate-of-photosynthesis-6tk66t>

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 – The leaf

This lesson will allow us to describe how leaves are adapted for their function and look at the features of stomata in detail. We will then explain how features enable the leaf to do its job

<https://classroom.thenational.academy/lessons/the-leaf-6dh36d>

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

There are two further lessons in this series if you want to challenge yourself to complete them. Lesson 11 is an application of knowledge and lesson 12 is a review (part 2)

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Year 8

Week 2 – SCIENCE – Plants and Photosynthesis

COMMUNITY

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.

Monday

Lesson 6 – Transport in plants

This lesson will involve labelling the xylem and phloem and describing their role in transporting water and sugars within the plant. We will then describe the path of water and glucose around the plant.

<https://classroom.thenational.academy/lessons/transport-in-plants-6qt66d>

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

Tuesday

Lesson 7 – Mid topic review

This lesson will review all content covered so far in this unit. We will look at two different methods of revision then there will be a series of quick fire questioning and extended answer practice to recap all knowledge obtained in this unit.

<https://classroom.thenational.academy/lessons/mid-topic-review-60tk0t>

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 – George Washington Carver

In this lesson we will be learning about George Washington Carver and how his method of crop rotation led to the improved crop yields of farmers in the United States during the 1800's.

<https://classroom.thenational.academy/lessons/george-washington-carver-cdjp6r>

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 – Plants & the atmosphere

In this lesson we will describe how carbon dioxide and oxygen levels have changed over the Earth's history and explain how plants have affected the levels of oxygen and carbon dioxide in the atmosphere. We will finish by describing and explaining the impact of recent human activities on carbon dioxide levels.

<https://classroom.thenational.academy/lessons/plants-and-the-atmosphere-ccwket>

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 – Plants as food

In this lesson we will describe the role of plants as producers and test common diet items for starch. We will then describe the importance of insect pollination to food security.

<https://classroom.thenational.academy/lessons/plants-as-food-61k34d>

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

There are two further lessons in this series if you want to challenge yourself to complete them. Lesson 11 is an application of knowledge and lesson 12 is a review (part 2)