

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

Year 7

Week 1 – SCIENCE – Energy

A Place in Time

Monday

Lesson 1 – Energy stores and transfers (part 1)

This lesson introduces energy stores and pathways and gives some real life examples.

<https://classroom.thenational.academy/lesson/s/energy-stores-and-transfers-part-1-68tkee>

TASKS: -

5. Watch the video of the lesson
6. Download the worksheet and complete the tasks
7. What have you learnt? Complete the exit quiz

Understanding and accepting that everything exists in time and place, and acknowledging that there are differences between people, places and objects and that things can change over time.

Tuesday

Lesson 2 – Energy stores and transfers (part 2)

This lesson starts to quantify energy, using box diagrams, and explains the concept of conservation of energy

<https://classroom.thenational.academy/lessons/energy-stores-and-transfers-part-2-cgw66c>

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 – Investigating energy transfers

This lesson introduces the Bunsen burner and uses it as a tool to investigate energy transfers

<https://classroom.thenational.academy/lesson/s/investigating-energy-transfers-c5k3at>

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 – Efficiency

This lesson summarises many of the foundational concepts about energy that have been introduced in lessons 1, 2 and 3 by investigating pendulums. It then discusses useful and wasted energy transfers and calculates efficiency from written questions and Sankey diagrams.

<https://classroom.thenational.academy/lessons/efficiency-c8vp6t>

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 – Power and energy

This lesson introduces power and its relationship to energy. It provides lots of opportunities to practice calculations and conversions.

<https://classroom.thenational.academy/lessons/power-and-energy-chh6ar>

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 7

Week 2 – SCIENCE – Energy

A Place in Time

Monday

Lesson 6 – Energy in the home

This lesson explains how to convert between different time units, rearrange the power equation and then apply this to real life examples by calculating domestic energy costs.

<https://classroom.thenational.academy/lessons/energy-in-the-home-70vkjt>

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

Understanding and accepting that everything exists in time and place, and acknowledging that there are differences between people, places and objects and that things can change over time.

Tuesday

Lesson 7 – Energy in food

This lesson explores the energy in different foods and revises key ideas about how to run a successful investigation including: identifying variables, making predictions, writing a method, analysing results and writing a conclusion.

<https://classroom.thenational.academy/lessons/energy-in-food-c4wk0t>

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 – Non-renewable energy resources

This lesson describes how fossil fuels are formed and the advantages and disadvantages of using these non-renewable energy resources

<https://classroom.thenational.academy/lessons/non-renewable-energy-resources-70u68t>

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 – Renewable energy resources

This lesson describes different renewable energy resources and the advantages and disadvantages of renewable energy resources.

<https://classroom.thenational.academy/lessons/renewable-energy-resources-chj3ar>

TASKS: -

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks

Friday

Lesson 10 – Anne Easley

This lesson focuses on a key scientist.

<https://classroom.thenational.academy/lessons/anne-easley-crt3cc>

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