

7-11 years

## Introducing Switched On for every journey – Stay off the tracks KS2 video

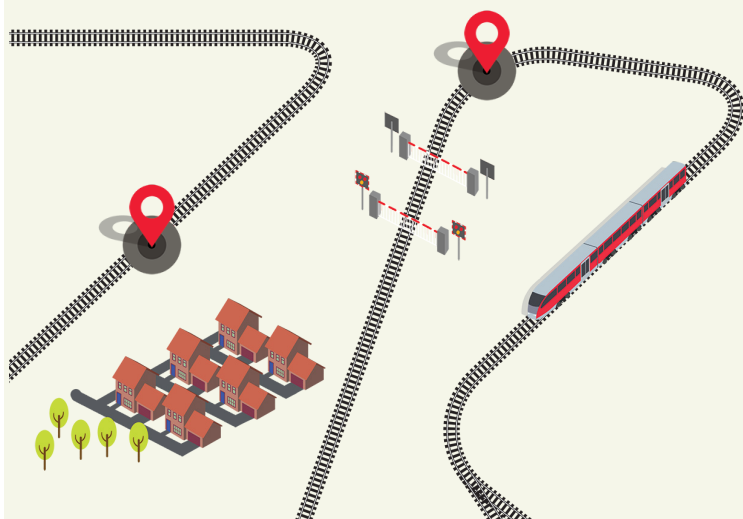
The Stay off the tracks video has been developed in collaboration with the rail industry and aims to illustrate some of the dangerous consequences of interacting improperly with the rail environment.

The video shows an interaction between an animator (Johnny) and a Specialist Burns Nurse (Nicole). They are working together to create a cartoon-style animation to show what could happen to people and their bodies if they interact with the railway dangerously. The film uses animated body parts to illustrate sensitive issues, but it is vital that pupils understand these animations represent real injuries and effects that could happen to a person in real life.

**This resource has been designed and is appropriate for the upper KS2 audience (9-11 years old). While this film uses animation it is important to note that it deals with serious issues and injury that some may find upsetting. This should be communicated to pupils, and parents can be given details of where to watch the video if they would like to pre-check content.**

## Introducing Switched On for every journey

This resource is a part of our Switched On for every journey suite, a programme designed for 7-11-year-olds.



With a focus on developing good judgement and decision-making skills, the Switched On for every journey programme not only ask pupils to identify potential dangers on their own journeys but to also spot risky behaviours in others.

From train stations to level crossings, pupils will be able to explain the different signs and sounds that could suggest a potential hazard. Real-life scenarios challenge them to use empathy and their developing rail safety knowledge to minimise risks. The programme encourages proactive thinking and supports pupils to understand the perspectives of other travellers and those working in the rail industry.

**We can all enjoy life's adventures when we spot signs of danger, look out for our friends and always stay Switched On.**

All other resources in the Switched On for every journey (7-11) programme can be found on the [Switched On website](https://www.switchedonrailsafety.co.uk).

## Curriculum links

### KS2

- **PSHE**  
Health and wellbeing: Mental health, Keeping safe  
Relationships: Friendships, Safe relationships  
Living in the wider world: Shared responsibilities
- **English**  
Reading, Spoken language

### P4-P7

- **PSE**  
Health and Wellbeing: Mental Health, Staying Safe, Friendships, Safe Relationships.  
Living in the Wider World: Shared Responsibilities
- **English**  
Reading and Talking

These resources can also be used within SMSC planning and delivery.

## Why is there a need to incorporate rail safety into your teaching?

There are 20,000 miles of track, 30,000 bridges, tunnels and viaducts plus thousands of signals, level crossings and stations across our rail network.

From special journeys to everyday commutes, the rail network helps get us where we need to be. Even if we're not travelling, we need to be switched on to the risks the rail environment can pose. There are more than 19,000 trespass incidents on the rail network every year.

Learning to hazard spot and address potentially dangerous behaviour starts at a young age. Schools have recognised the importance of teaching about a range of safety behaviours through PSHE and Citizenship lessons in school. The rail industry wants to support this vital work.

## Getting Started with the Switched On for every journey programme

- All 7-11 resources can be accessed via the [Switched On website](https://www.switchedonrailsafety.co.uk). The map acts as the navigation, with each stop being a new opportunity to develop Switched On skills and knowledge.
- If possible, start by screensharing the map. Draw pupil's attention to the map and ask what they think this map is all about? Perhaps they will pick up some clues and see that this is all about trains and the tracks. Encourage them to share their initial thoughts.
- You may wish to allow pupils to choose their own journey and decide which resource they'd like to start with, or you can follow the route suggested in this guidance document.
- Select the area you would like to start at and navigate to the correct part of the teacher guidance.

## How to run the activities at school

This resource has been designed to be flexible and easy-to-use with a range of options for delivery. This teacher guidance document contains tips for delivery and a loose script that can be adapted by educators to best suit the needs of their learners.

Teachers may decide to:

- Deliver the activities linked to each lesson individually within the normal timetable.
- Run all of the activities across a week, as part of a topic focus week, like 'Rail Safety Week'.

## Differentiation across KS2

Additional delivery and differentiation recommendations have been made for each activity, as there is likely to be a range of attainment within this age group.

- Activities for ages 7-9 are knowledge focussed. They teach behaviour and awareness skills.
- The resources for ages 9-11 develop these skills further, provoking thought about independent behaviour and challenging risky behavioural norms.

**This resource is designed and appropriate for the upper age group of 9-11 year olds.**

## How to run the activities in other settings

We're aware that youth groups and families may also want to use the materials. Specific guidance has been provided where appropriate within the lesson plan.

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## Resource overview

Name of resource	Format	Learning outcomes (9-11)
Types of level crossings	PowerPoint presentation	<ul style="list-style-type: none"> <li>I can identify specific parts of the railway that are dangerous.</li> <li>I can describe unsafe behaviours that might cause these risks.</li> <li>I can describe specific impacts to the body (and parts of the body) caused by interacting with the railway in a dangerous way.</li> <li>I can extract and create important warning messages about safety around the railway.</li> </ul>



### Resource

## Stay off the tracks KS2 film

### Overview

This teacher guide will walk you through the delivery of the Switched On for every journey – **Stay off the tracks KS2 film** for 9-11 year olds, giving prompts and questions to aid delivery and learning.

### Supporting resources and equipment required

- Stay off the tracks video for KS2
- Interactive whiteboard/projector and computer connection
- Stay off the tracks student worksheet
- Stay off the tracks KS2 – transcript

### Timing

1 x 45 – 60 minute lesson

If there are too many tasks for this length or time, please choose Task 1 and Task 2, and complete this alongside Task 3.

### Home learning tips

The video can be used as home learning, with students responding to the questions rather than undertaking the discussions. Discussion may take place between the home educator and the student, or questions can be used for individual written reflections.

### Starter activity

- Provide a content warning ahead of starting this lesson:
  - While this film uses animation it is important to note that it deals with serious issues and injury that some may find upsetting. This should be communicated to pupils, and parents can be given details of where to watch the video if they would like to pre-check content.**
- Watch the video through once with pupils. Ahead of watching, guide pupils to listen out for what parts of the railway can be dangerous if interacted with unsafely.
- After watching ask the class: **What are the specific parts of the railway that can be dangerous? And why?**
- Check student understanding and reinforce that the two parts of the railway that are dangerous when interacted with unsafely – **The overhead live wires** and the **electric rail**.

## Task 1

### Key information from the video

- Split pupils into groups (either as partners or small groups of 3-5 pupils).
- Provide the worksheet to pupils/groups and ask them to fill out task 1.
- Ahead of re-playing the video ask them the following questions:
  - From the video, accompanying transcript, and your own knowledge, can you:
    1. Identify which part of the railway could be dangerous and why?
    2. Describe what happens to the body when it comes into contact with the electricity from the overhead live wires or electric rail?
    3. Discuss the type of behaviours or situations that could cause such an event to occur, and whether this is safe behaviour on the railway.
- Run a class discussion to gather answers – call on groups to hear pupils' answers to the questions, including a range of examples of the unsafe behaviour that someone might be engaging in to cause this to happen.
- As a class build a full answer to each question from the different ideas from pairs/groups.
- These can be charted on an interactive whiteboard or flipchart to use in a later task.

Please see the answers below to support you to facilitate this discussion and recognise correct answers:

#### **Part of the railway that can be dangerous as featured in the video...**

**Overhead live wires** (which are sometimes referred to as overhead line equipment or overhead cables) – carry 25,000 volts of electricity. 100 times what you have in your sockets at home.

Electricity can jump up to 3 metres through the air, causing significant electrical shock to the body.

**Electric Rail** (or otherwise known as the electrified or electric third rail) – a track, that looks just like a regular train track – but carries 750 volts of electricity.

#### **What happens to the body or parts of the body when interacting with this part of the railway?**

Your skin will instantly burn, leaving lifelong scars.

Your heart will burn and stop beating if it is in the path of the electricity.

If you touch the track, it will grip your body meaning that you can't escape.

The electricity is so strong that your body will be held in its grip until the electricity is switched off.

#### **Behaviours or situations that may cause this to happen...**

- Taking a shortcut, or jumping over a fence, to cross the tracks to cut time off a journey.
- Finding somewhere new and exciting to play and explore.
- Trespassing on the tracks as a dare or wanting to make a viral video about accessing the tracks.

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**Bonus discussion point:** In the video, the animator says that phrase “And suddenly – out of nowhere, the electricity leaps through the air.” It is important to make pupils aware that this would not occur out of nowhere but would occur when a human body gets much too close to the overhead live wires. The electricity from the overhead wires can arc or jump 3 meters, so you don’t need to touch it for it to be dangerous.

**Emphasise that you are safe standing on a platform but for the reason mentioned above, it is vital to always pay attention to the signs present and to stay Switched On to make sure you’re never somewhere we’re not supposed to be on the railway.**

## Task 2

### The impacts on the body

- Split the class in half, with one half focusing on the impact on the **heart** (from the electrical current) and one half focusing on the impact on the **kidneys** (from the electrical current).
- Ahead of rewatching the video (if required) ask pupils to identify:
  1. What happens to the heart or kidney at the moment of electrocution?
  2. What can happen to the heart or kidneys in the longer term – after the event?
- Call on pupils to share responses, again charting ideas to use in Task 3.

Please see the answers below to support you to facilitate this discussion and recognise correct answers:

	Heart	Kidneys
<b>At the point of electrocution</b>	If your heart is in the path of the electricity, it can burn and stop beating.	The electric shock may damage your kidneys but you might not know about this damage in the moment because it won’t be the only thing happening – your heart and your skin could also be shocked and burned.
<b>After the event</b>	<p>If your heart has stopped beating you will be dead. Or you may have to be revived (through a medic shocking your heart back to life).</p> <p>If your heart does continue to beat it will be seriously damaged and you will require a long stay in hospital, where you will not be able to see friends or do fun activities with them.</p>	<p>Your kidneys filter waste out of your blood and produce urine. So if they are damaged by electricity, you’re in real trouble.</p> <p>For the rest of your life, you might not be able to go to the toilet properly.</p>

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## Task 3

### Warning messages

- Split pupils back into pairs.
- Ask the pairs to think about the following two questions (1x per partner) allowing 1 minute for each question:
  - Partner A: Why do you think the rail industry decided to use an animation of the body parts rather than a dramatised film?
  - Partner B: How would it make you feel if you saw this happening to a real person?
- Teacher to hear responses from pairs as to why they used animation and how this would make them feel/ be affected if it were a real person.

**Answer:** The choice of the animation was about making sure the messages could be presented without it being too gory or graphic, but this is what really happens, and so it is important to ensure we follow advice about railway safety to keep ourselves and others safe.

- Ask the class to refer back to their worksheets.
- Guide them to use the ideas from Task 1 and 2 to help form their messages, and ask them what would be their three big warnings/ most important messages that they would want to give to a friend or family member about trespassing on the railway?
- Pupils can write their ideas independently on a separate piece of paper.
- Finish the task by hearing some examples, recognising important messages that we would want to reinforce about safety warnings and the railway.

### Next steps

Congratulate pupils on completing this resource.

If you're looking for other ways to teach rail safety to your students head over to the wider [Switched On website](https://www.switchedonrailsafety.co.uk) for more resources and activities!

