



Teachers' Notes

Warning Signs on the Railway - Electricity

The 'Warning Signs on the Railway – Electricity' whiteboard resource provides a basis for you to discuss with your pupils what railway safety signage means and the potential dangers of going on or near electrified railway tracks.

The resource includes characters found in the 'It's not Cool' and 'Cool Guide' publications that can be ordered free of charge by visiting the Track Off website at: <http://www.trackoff.org/materials.html>. Some of the video clips in the Track Off Teaching Zone video bank (<http://www.teachingzone.org/videobank.htm>) can be downloaded to complement this resource.

1 The PowerPoint version of the resource is a short program with learning points.

The notes with the slides gives some basic information on which to base your discussion.

2 The Smart Notebook version of the resource allows you to:

- Import the warning signs from the gallery
- Import characters, arrows and captions to indicate learning points
- Import characters and speech bubbles to create your own learning points

The notes for each page on which to base your discussion are as follows:

Page 1

Trains travel quickly and take the length of 20 football pitches to stop when going at top speed. If you go down on the railway tracks trains cannot swerve out of your way like a car. Always take notice of warning signs near the railway – warning sign 'Beware of Trains'.

Page 2

Many railway tracks have an extra danger because they have high voltage electricity passing through overhead live wires - warning sign Electricity flash symbol and words 'Danger High Voltage'

Page 3

Trains on tracks with overhead wires connect with the wires by a piece of equipment called a pantograph – warning sign Electricity flash symbol and words 'Danger Overhead live wires'

Page 4

High voltage electricity can jump gaps – you don't have to touch the wires to be killed or badly burned.

Page 5

The overhead wires are live 24/7 and are never switched off even at holiday times.

Page 6

The power is always there even if there are no trains running on the track at the time.

Page 7

Some railway tracks are electrified by a live conductor rail that runs along the ground next to the tracks.

Page 8

The train picks up the electricity from the live rail by what is called a 'shoe'.

Page 9

These extra live rails look like any other rails but rest on insulators as well as sleepers - warning sign Electricity flash symbol and words 'Danger Live rails'

Page 10

At train stations signs warn you about the live extra rails – warning signs Electricity flash symbol and words 'Danger Live rails' + Line through person walking symbol and words 'Passengers must not cross the line'.

Page 11

Step on the live extra rail and you will get a massive electric shock – warning sign Electricity flash symbol and words 'Do not touch the live rail'.

Page 12

If you step on the extra rail you could be killed or badly burned. Always take notice of the warning signs on the railways.