

Rail Safety - Lesson Plans

Activity 3 – Signs of Danger

Curriculum for Excellence Experiences and Outcomes

I am learning to assess and manage risk, to protect myself and others, and to reduce the potential for harm when possible. **HWB 0-16a**

I know and can demonstrate how to travel safely. **HWB 0-18a**

1. Connecting the Learning - Discuss what learners can remember from previous session. Encourage learners to focus on where electricity can be found on electric railways, examples of irresponsible behaviour on or near electric railways and how we can stay safe around electric railways. Ask learners to consider how, if electricity is invisible, how we know it's on and to stay away? Learners may mention warning signs. Explain that in today's lesson, learners will find out more about some important railway warning signs.

2. Sharing the Learning Outcomes -

- I can identify 3 railway warning signs and explain what they mean.
- I can identify dangers and warning signs in my school and/or local community.
- I can create my own sign to warn others about the dangers of electricity on the railway.

3. Active Learning

- Begin this activity by sharing some electrification facts with the class:

- The third rail and overhead power lines have electricity flowing through them at all times and are never switched off.
- Electricity in overhead power lines can 'jump'. You don't have to touch the overhead power lines to get electrocuted. Playing with a kite or balloon, or dangling things from railway bridges near electric power lines are very dangerous things to do.
- The third rail looks like a normal rail, but is electrified. The electricity is so strong that if you touch the rail, you will be seriously injured or killed.
- 9 out of 10 people die from the electric shock received from getting too close to railway overhead power lines.

Show learners the following video from BBC Learning Zone which is an engaging way to demonstrate the dangers of being close to electricity. It uses a dummy to show how electricity can reach you before you even touch it:

<http://www.bbc.co.uk/education/clips/zfw9wmn>

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Did learners find anything interesting and/or surprising in the video?

Now distribute Worksheet 3 'Signs of Danger' to pupils. This could be done individually, in pairs or in small groups. Explain that the three signs warn us of danger on or near railway lines. Learners should place a tick in the second column if they have seen any of the signs before. Through discussion, they should reflect on what they think each sign means and record their thoughts in the third column. Allow time for learners to work through this task and when appropriate invite learners to share their thoughts with the rest of the class. The class teacher should clarify what each sign means, making use of online images of these signs on or near railway lines for added impact.

4. Demonstrating Understanding - Based on what they have learned about electric railways to date, learners should create their own sign to warn children and adults about the dangers of electricity on the railway. Time should be taken to share these as a whole class. See 'create your own sign' worksheet.

If possible, a trip around the school's local area could be organised (or simply around the school). Can learners identify dangers? Learners could create a list of all the possible hazards they see around them and record any warning signs they find. Discuss their views on what they have seen and experienced. Ask: "Why is it important to read signs and follow instructions?" What else could be done to help young people act responsibly when it comes to electricity?

5. Review and Recall - Refer to the Learning Outcomes and ask learners to remind you about the relevant warning signs they have learned about. Establish that these warning signs are in place to keep all of us safe and must never be ignored.