Reading railway images

	Key Learning Area		Most appropriate level and suggested number of lessons
	English	Reading railway images	Stage 2-3
		How do railway signs assist train passengers?	
000	Science and Technology		1-2 lessons

Teacher briefing

Students explore train station signs and icons, and consider the importance of signs. They discuss rail signs appropriate for Sydney Metro Northwest station precincts. Students design and create their own sets of digital railway signs for Sydney Metro Northwest stations or trains using graphic software.

Focus questions:

- How do signs assist train passengers?
- What are the different purposes of signs?
- Why do some signs have icons and text, while others only have icons?

Requirements for these lessons

- Interactive whiteboard and Internet access
- Computers or laptops
- · Graphic software such as Paint.net, Microsoft Word or PowerPoint
- Hard copy or iPads to read and view signs
- Activity sheets 1 and 2 (pages 239-241).

Assessment Summative assessments can be made during whole class and group activities.

Formative assessment opportunities are available as students work on digital Sydney Metro Northwest signs. Teachers can assess their understanding of the purpose of different types of railway visual signs and ability to read visual signs.

Key terms and vocabulary

Sydney Metro Northwest, signage, icons.

Web links



A complete set of free passenger and travel icons http://www.aiga.org/symbol-signs

TBM1 Elizabeth assembly and start of tunnelling https://www.facebook.com/SydneyMetro/videos/1672143223073313/

Artist's impression movie-clip of Sydney Metro Northwest trains https://youtu.be/GKi69Az5UHI?list=PLL4evDjFo88shJdWUL1m7m7g7GdWOmGz_

Kellyville Station community day https://www.facebook.com/SydneyMetro/videos/1407039689427172/

Print techniques in the primary creative arts classroom http://www.curriculumonline.ie/getmedia/0e0ccff3-97c4-45c8-b813-e7c119a650c3/ PSEC04A_Visual_Arts_Curriculum.pdf

List and explanation of different group discussion strategies http://gsi.berkeley.edu/teachingguide/sections/groupwork.html#techniques

Suitable graphic design software https://paint-net.en.softonic.com/

Syllabus links

Science and Technology K-6

(ST2-2DP-T) selects and uses materials, tools and equipment to develop solutions for a need or opportunity

(ST1-3DP-T) describes, follows and represents algorithms to solve problems

(ACTDIPOO4) segment, describe and represent a sequence of steps and decisions (algorithms) needed to solve problems

(ACTDIPO05) explore how people safely use information systems to meet information, communication and recreation needs.

English K-10

(EN2-10C) thinks imaginatively, creatively and interpretively about information, ideas and texts when responding to and composing texts

(EN3-7C) thinks imaginatively, creatively, interpretively and critically about information and ideas and identifies connections between texts when responding to and composing texts.

Learning experiences

Step 1 - Class discussion

Teacher displays signs and icons in Activity sheets 1 and 2 on the interactive whiteboard or distributes them as hard copies. See Activity sheets 1 and 2, (pages 239-241).

Use the following questions and discussion strategies such as 'Think Pair Share, Share Square' and 'Roundtable' as a guide to stimulate class discussion and interact with the signs and icons. (See web links for an explanation of these techniques).

- Why are signs important?
- How can signs assist train travel?
- In what ways have rail signs assisted your train travel?

Display a variety of signs and icons and ask students to brainstorm what they mean.

Step 2 - Group activity (four to six students)



Use a drama activity to read, comprehend and critically interpret the visual icons and signs.

Teacher displays a sign to the class. Groups have five minutes to create a 'freeze' drama scene depicting people responding to this railway sign. For example, using the sign above, students may create a 'freeze' scene depicting the inside of a train carriage where people are vacating seats for an elderly person, or holding a lift door open for someone in a wheelchair.

Teacher selects a particular group and asks other students to interpret the 'freeze' frame. Contrast and reflect on different group representations.

Figure 28: The International Symbol of Access (ISA) consists of a blue square overlaid in white with a stylised image of a person using a wheelchair. It is an international standard, ISO 7001. Further information available at: http://www.riglobal.org/about/intl-symbol-of-access/

Use these questions as a guide:

- What is the 'freeze' scene telling us?
- · How has the group interpreted the sign?
- · Why is this sign important when using public transport systems?
- Can the sign be interpreted in different ways?
- Do signs have a social purpose at railway stations?

Step 3 - Group activity (two to three students)

Analyse and classify signage in and around railway stations. Other transport locations can be included. Teacher poses the focus question to the class: How do signs assist train passengers?

Groups view a selection of signs, such as those in Activity sheet 1, and classify the signs any way they choose. They must explain the groupings. Students may group signs according to the type of picture, colour or presentation of the sign, or they could group them according to the social role the sign plays. For example, does the sign give a safety warning, provide information or point out where something is located?

Step 4 - Class activity

Discuss and classify the purposes and roles of rail signage

Select students to explain the way each group has classified the signs. Class discusses and reflects on the different groupings and creates a classification matrix on the interactive whiteboard. Display rail signs and classify signs using the matrix.

Watch the short films 'Sydney's new train unveiled' as part of Sydney Metro and 'Sydney Metro Northwest station and rail line'. (See web links.)

Step 5 - Group activity (two to three students)

In groups, students create a digital graphic sign for stations or trains. Activity sheets 1 and 2 may serve as stimuli.

Step 6 - Reflection

Groups present their digital railway signs to the class discussing their purpose and role. The teacher facilitates a discussion using each group's signs and reflects on the focus question, How do signs assist train passengers?

Teacher references and extension work

Stage modifications: Stage 1

This learning experience could be simplified to meet Stage 1 requirements. The teacher could develop a class railway sign, and discuss and explain its purpose and visual features. Students in small groups can then focus on creating the class sign using graphic software, or work individually to create a graphic railway sign using different print techniques. (See web links).

Extension activities

Students work individually to create a graphic railway sign using different print techniques. These could include monoprinting, screen-printing and stenciling. (See web links for sites that discuss different print techniques in the primary classroom).

Activity sheet 1

What do these signs mean and how would you classify them?



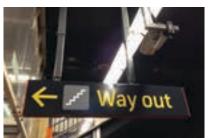




Sign 2 Sign 3 Sign 1







Sign 5 Sign 6 Sign 4



Sign 7





Sign 8 Sign 9 Sign 10

These images show Transport for NSW wayfinding signage.





Northwest

Activity sheet 2

Identify these common sign icons.

The complete set of icons below can be found online at

http://www.aiga.org/symbol-signs







Icon 1 Icon 2 Icon 3







Icon 5 Icon 6 Icon 4







Icon 7 Icon 8 Icon 9





Northwest

Activity sheet 2

Identify these common sign icons.

The complete set of icons below can be found online at

http://www.aiga.org/symbol-signs

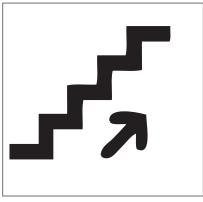


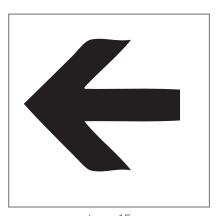




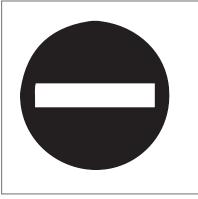
Icon 10 Icon 11







Icon 13 Icon 14 Icon 15







Icon 16 Icon 17 Icon 18





Northwest