

**Repurposed
Railway Item -
small or big**



About the Project



To the teacher

Teacher

For schools and/or students who cannot visit the museum, for many reasons ie long travel distances, health reasons or financially reasons, we have provided a class rail project - **Repurposed Railway Item** similar to Show and Tell. This project is aligned to the Australian Curriculum and reflects Teaching for Effective Learning (TfEL) pedagogies. Material is most suitable for **Year 3 - Year 7**.

This project encourages the students to explore and investigate the diversity between their surroundings and learn more about a time gone by. It challenges and encourages the exchange of ideas, build communication skills and listening skills. Students have the opportunity to bring a repurposed rail object, take a photo or a drawing and share the information with the class. Your school/class becomes a museum!

We have provided a **Project Sheet** (page 10), **Support Material** and if interested in **sharing** the learning experiencing we encourage you to complete the section (page 10) so that we can share information and experiences.

Resource design

Foundation English Language	
Language variation and change	Elaborations
Understand that punctuation is a feature of written text different from letters; recognise how capital letters are used for names, and that capital letters and full stops signal the beginning and end of sentences (ACELA1432)	<ul style="list-style-type: none"> pointing to the letters and the punctuation in a text commenting on punctuation encountered in the everyday texts, for example 'That's the letter that starts my name', 'The name of my family and my town has a capital letter'
Recognise and name all upper and lower case letters (graphemes) and know the most common sound that each letter represents (ACELA1440)	<ul style="list-style-type: none"> using familiar and common letters in hand-written and digital communications identifying familiar and recurring letters and the use of upper and lower case in written texts in classroom

Science Year 3	
Curriculum content descriptions With guidance, identify questions in familiar contexts that can be investigated scientifically and make predictions based on prior knowledge (AC SIS053)	Elaborations <ul style="list-style-type: none"> choosing questions to investigate from a list of possibilities jointly constructing questions that may form the basis for investigation listing shared experiences as a whole class and identifying possible investigations working in groups to discuss things that might happen during an investigation
Science Year 4	
Processing and analysing data and information Compare results with predictions, suggesting possible reasons for findings (AC SIS216)	Elaborations <ul style="list-style-type: none"> discussing how well predictions matched results from an investigation and proposing reasons for findings comparing, in small groups, proposed reasons for findings and explaining their reasoning
Maths Year 3	
Measurement and Geometry Measure, order and compare objects using familiar metric units of length, mass and capacity (AC M MG061)	Elaborations <ul style="list-style-type: none"> recognising the importance of using common units of measurement recognising and using centimetres and metres, grams and kilograms, and millilitres and litres
Maths Year 4	
Curriculum content descriptions Compare angles and classify them as equal to, greater than, or less than, a right angle (AC M MG089)	Elaborations <ul style="list-style-type: none"> creating angles and comparing them to a right angle using digital technologies
Science Year 7	
Science Understanding Change to an object's motion is caused by unbalanced forces, including Earth's gravitational attraction, acting on the object (AC SSU117) <ul style="list-style-type: none"> investigating a simple machine such as lever or pulley system 	Elaborations <ul style="list-style-type: none"> investigating the effects of applying different forces to familiar objects investigating common situations where forces are balanced, such as stationary objects, and unbalanced, such as falling objects investigating a simple machine such as a lever or pulley system exploring how gravity affects objects on the surface of Earth

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Teacher about the Project

Repurposed Railway Item

Repurposed Railway Item - big or small

The Merriam-Webster Dictionary defines repurposing as “to give a new purpose or use to” In this instance the railway item becomes or fulfills a different function (creative reuse or repurposing) rather than the item becoming landfill. A building (example a railway station) which was destined for demolition, can be given a new lease of life example restaurant or hairdresser.

About the repurposed railway items

You may wish that the students bring an item and share the information, same as Show and Tell format. If it is not possible to bring the item, as it may be too large, suggest they bring a photo or perhaps a drawing/painting.

Project Sheet - Tell about the item

For the student we have provided a Project Sheet to assist and evaluate the learning exercise. Information is required, example -

- what is it made out of - material?
- age of the item
- more about repurposing, refer to the list below - advantages and disadvantages
- do you know who made the item? - what skills were needed?

What if the student cannot find an item

If any student could not source an item suggest that they could take part in the Project Sheet, as it can be used as a Question Sheet.

Advantages and disadvantages re repurposed items

Advantages

- Energy and raw materials savings as replacing many single use products with one reusable one reduces the number that need to be manufactured.
- Reduced disposal needs and costs.
- Refurbishment can bring sophisticated, sustainable, well paid jobs to underdeveloped economies.
- Repurposing takes usable items, including raw materials, and turns them into items that people can use, keeping pressure off the landfills and disposal areas. By reducing the amount of trash in our current waste areas we are protecting future lands from becoming landfills themselves
- Cost savings for business and consumers as a reusable product is often cheaper than the many single use products it replaces.
- Some older items were better handcrafted and appreciate in value.

Disadvantages are also apparent:

- Reuse often requires cleaning or transport, which have environmental costs.
- Some items, such as freon appliances, infant auto seats, older tube TVs and secondhand automobiles could be hazardous or less energy efficient as they continue to be used.
- Reusable products need to be more durable than single-use products, and hence require more material per item. This is particularly significant if only a small proportion of the reusable products are in fact reused.
- Sorting and preparing items for reuse takes time, which is inconvenient for consumers and costs money for businesses.
- Knowing the standards that legacy products conform to is required for knowing what adapters to buy for newer products to be compatible with them, even though the cost of adapters for such applications is a minor disadvantage.
- Being a rather minor disadvantage, metal that is repurposed later on can sometimes contain rust, seeing as it sometimes ages before reuse.

Knowing more about repurposed rail items

Examples of rail repurposed items are shown on pages 5 to 10.

Share your project

We would like to hear from you! Tell us about your rail item. Refer to page 10 if you wish to share the information.

Support Material Rail - Sculpture

1 Example of repurposed rail items



The Iron Man monument was designed and built by the work crews constructing the 831 km long standard gauge rail line between Tarcoola and Alice Springs, which commenced in 1975 and was opened in October 1980. The monument was erected in May 1980 and symbolises the efforts of the track laying gang. The Iron Man, made from 47kg/m rail and carrying a concrete sleeper, is to acknowledge the one millionth concrete sleeper laid in the track nearby. Garrie has also taken the time to apply fresh paint to the monument, to liven it up and to preserve it for the future.

Excerpt from article

Catch Point

(NRM Publication)

Iron Man & signs get a facelift

WORDS DAVID PAXTON & GARRIE JONES & ONE RAIL

2

Rail - Ant path



Semi-abandoned rail tracks in Kadina (Yorke Peninsula, South Australia) are now mostly used by the ants. Ants, being social insects, have been able to reuse rail tracks abandoned by humans for their own transportation (The rails pictured are two rails on the same side of the track: this is the dual-gauge rails, with the outer rail for the Irish gauge, and the inner, rustier one, for the standard gauge)

Source- web

File:Kadina-Ants-run-on-the-rails-0678.jpg

Created: 30 March 2008

3 Rail - Fencing

Fencing made from rail seen at the Museum site

Museum collection



Example of rail being used as a simple fence. Rail was used due to its easy availability, cost-effective and hard-wearing properties.

4 Multi-meter - decorative lamp



R Sanders

A multimeter is a test tool used to measure two or more electrical values—principally voltage (volts), current (amps) and resistance (ohms). It is a standard diagnostic tool for technicians in the electrical/electronic industries. The heart of the instrument (a customised microprocessor) has an extreme temperature compensation circuit built in, which enables it to give accurate measurements. This multi- metre was possible used for testing signalling equipment.

Railway frames and gauges - becomes industrial furniture

5



Coffee table built using a 2' gauge railway wagon frame. Artist Rob Sanders

6



SA Railways Gauge Lamp by Rob Sanders

About the artist - Rob Sanders

Hailing from a family of engineers, Sanders' Steampunk, or Deiselpunk, Sanders' Furniture and Lighting represents a natural progression from his earlier work on steam engines, historic aircraft and old cars, and restoration of mechanical antiques, vintage machinery.



- 7 'This lovely **rustic design seat** is firmly anchored into the ground to a depth of 600mm. Solidly constructed from 'A' grade recycled railway sleepers and bolted together from the rear this garden seat makes an impression in any setting.

In its finished state it can completely transform a garden area and give it a unique and functional purpose.'

<http://www.kropf.com.au/Detail/Anchored-garden-seat.htm>

8 **Dog Spikes**
railway spikes (also known as a dog spike) - fastener



Robert Livingston Stevens is credited with the invention of the railroad spike, first used 1832. A railway spike is a large nail used to secure and fasten the rail to the sleeper. The main function of the spike is to ensure a correct gauge position.

Dog spike - named because of the two lugs on either side, the dog spike looks just like the dog's head. Dog spikes come in different sizes.

See further art repurposed dog spikes here

https://www.pinterest.com.au/pin/3518505935832335/?nic_v2=1a3MEqIBQ





'The North Adelaide Railway Station **buildings** are viewed from across the tracks with the signal box visible in the distance. Railway employees, passengers and a dog pose on the platform for the photographer. On the right a man stands next to a rail wagon, possibly laden with wood.'

Photograph taken about 1880 - public domain



Station transformed to Shop and Cafe

<https://www.weekendnotes.com/railway-stations-re-used-cafes-adelaide/>

'Long before its current owner, Emily Pescod had a vision to open the Red House Shop and Cafe at the abandoned railway building, the North Adelaide Railway Station started life in 1857, with the infrastructure including a waiting room, ticket office, ladies waiting room as well as an attached four room residence and garden.

North Adelaide station building is the third oldest surviving railway station in South Australia and the fourth oldest in Australia. It is also one of the few original station houses remaining in our nation. Emily Pescod certainly saw a huge potential in resurrecting the location, fuelled by her passion for vintage clothing.

In fact, Emily's original intention was to focus on the vintage and retro fashions with a small cafe attached. Little did she know at the time that the popularity of the cafe would exceed all expectations to the extent that today the cafe has overwhelmingly taken off, with the vintage fashion being a lesser but still important part of the business.'

**For the Student
Project Sheet**

Repurposed railway item - Show and Tell

To the Teacher

Please send
the information
with photos
if you wish to
share information

Name the item?

Who used it?

How was it used - its purpose.

How old is the item?

How did you get it?

What is it made from?

Tell more of its history.

Can you list advantages and disadvantage or repurposing the item.

Do you think the repurposed item has a clever way to hook people on history? Explain.

Any other information that you may wish to share.

Teacher sharing the project

Repurposed Railway Item

Share your Repurposed Railway Item - Class project

Do you want to share your item and information with other students? If so we would love to hear from you. Your entry may be selected by 'Curator's Choice' and posted at our NRM Web page in the Learn Section, till end 2023.

Note one entry from each class

Please complete this section

Your details

Name of the School

Class age

Class teacher /Contact person

Name

Email Phone

Permission to be posted on NRM web page

Signature Date.....//

What we require

- 2 or 3 photos of the chosen item (JPG size not exceeding 2MG each) - student to provide
- Completed Project Sheet (page10) - student to complete
- Your school details (see boxed section above) - teacher to complete

Send all documents to

Shylie Edwards Graphic Designer (Volunteer)
T: 8341 1690
E: graphics@nrm.org.au

We hope to hear from you no later than 31.10.2023.

Gabby Sexton
Curator - Collections