

Inquiry Questions

- Does technology change lives for the better?
- How do we see people adapt to the future through the past?
- How can we create a better future?

Dilge's Blacksmiths (Map 22)

Before the Industrial Revolution people created tools and other objects by hand. When we started replacing muscle power with metal machines driven by steam to do repetitive work, some metal items still had to be hand-smithed; for example, bespoke horse shoes.

The foundries of the Industrial Revolution (like Soho Foundry further up Main Street) cast metal components in moulds – an exact replica of the component can be made repeatedly with a mould. These pieces – rods, rivets, and cogs can then be pieced together into a wide variety of objects (trains, boilers, railway tracks, etc.).

Ask the blacksmith what sort of objects he specialises in.

Q. Can you spot where the heat and energy are coming from for the Blacksmith to heat and shape the metal? The forge and large bellows create the fire for heat by burning wood. Human muscle power (and hammer, which extends the power of the arm) do the rest.

Criterion Store (Map 38)

The Industrial Revolution changed the power and production capacity of factories and these changes influenced how people dressed and viewed each other. The ability to mass-produce these colours and mass print (block printing, bulk dyeing) made colour more affordable.

Textile mills were one of the first industries to industrialize, powering their spinning wheels and looms with water and then steam engines. This is a very colourful period in history. By the 1860s roller printing allowed textiles to be printed with up to 8 colours. Burning coal to produce steam led to some other interesting innovations. Modern dyes were accidentally discovered when Henry Perkins, investigating uses for coal tar, made purple, and with the help of a mill owner moved into production. This was followed by emerald green and the rapid rise of synthetic dyes.

Improvements in transporting goods, the rise of relatively cheap fashion magazines, cheaper paper patterns and mass-produced fabrics made colour and fashion accessible to the working classes. Colour was easier to copy than complicated tailoring (shape and make of an outfit).

Q. What colours can you see in the shop windows? A. Purple, red, green. Look for these colours on wallpaper, clothing and carpet.

Q. Why do you think some people were worried about the rise of colour? A. Fashion (colour, fabric, style) was an important way of distinguishing class and economic success. With easy colour and pattern, lower classes could more easily look like their employers or the upper class

Industrial Mining (Map 64 - 66)

This area demonstrates what a steam-powered company gold mine looked like by the late 19th century. By 1861 there were already 19 Quartz Mines in Ballarat, with more appearing in the following 20 years. It includes a winding house connected to a Poppet Head, by which gold-bearing quartz is brought to the surface by an elevator (from up to 500m below) for processing. The extracted quartz was crushed into a powder in a nearby Battery House so the tiny particles of gold could be extracted (typically using mercury or cyanide – both highly toxic chemicals). A Cornish Beam Pump is connected to help pump out water. All of the steam required to power these machines was produced in the Boiler House by burning wood from local forests. Despite its apparent chaos, steam powered industrial mining was the most sophisticated technology of its day and transformed the economic and environmental landscape of Victoria.

Q. Which aspects of the local environment appear to have recovered from the gold mining era? A. The trees have regrown since gold mining which largely ended when World War 1 began. Ballarat's 21st century economy is based around education, healthcare and tourism. A small amount of mining and manufacturing continue. Use the stairs on the right hand side of the Poppet Head to climb to the mullock heap (mining waste) platform to see across Ballarat today

Wheelwrights (Map 73)

This working exhibit demonstrates how machines were attached to steam engines in the late 19th century to help people mass produce items that previously took a long time to make by hand. A wheelwright is a highly-skilled tradesperson who can fashion the hub, spokes, and bent timber needed for a wheel and can then 'hot tyre' a metal ring over the wooden structure ready to attach the finished product to a horse-drawn vehicle. In this workshop, you can see early mass production techniques at work to make specific parts.

Notice the difference when you visit the Coachbuilder next door. Here you can see craftsmen individually creating multiple objects, an example of how work was done before the Industrial Revolution. Talk with Sovereign Hill's rare tradespeople about the work they do and the industrial machinery they use.

The Wheelwrights and Coachbuilders service horse-drawn vehicles. Good horses were a significant investment. Read the posters around town and chat to the tradespeople to find out the value of a good horse. A. Horse prices varied, but were similar to the cost of a car today. For example, in July 1858, Ballarat Horse Market hacks (poorest quality horse) started at 20 pounds and went up to 95 for first-class draught horses.

Compare and contrast the tools and workshop set-up of the Coachbuilder (individual build) and Wheelwrights (mass production). What is the same and what is different? Notice the use of steam power in place of muscle power for some machines, the number of people working in the space, and the specialised nature of their jobs.

SOVEREIGN HILL LEARNING



VISIT THE PRECINCTS

THE DIGGINGS

1851 - 1854: Daily life in a tent city, including housing, mining, business, law and order as gold seekers searched for a better life. **Why was gold so valuable, and how did it change peoples lives?**

SPEEDWELL STREET

1856 - 1861: Aligned to Main Street, highlighting the change in living conditions, business and technology that improved daily life. **How do we measure change? Were we more sustainable in the past?**

MAIN STREET

1855 - 1861: Ballarat as a town with the building of permanent structures and amenities to service the needs and wants of the community, economically and socially. **How did the gold rush shape modern Australia?**

STEAM, MINING INDUSTRY

1861 - 1914: Showcasing technology and innovation that contributed to the rapid development of Ballarat and the broader region. **How does technology shape and change lives?**

CHINESE VILLAGE

1857 - 1860: The cultural and social living conditions of Chinese immigrants within the larger narrative of the gold rush, exploring their struggles and successes. **Why do people risk everything in search for a better life?**

WADAWURRUNG CULTURAL

First Nations artists share their reflections of culture, history, and heritage. **What creates a sense of belonging and connection to the place you call home?**

VISITOR SERVICES

- Information
- Food & Drink
- Toilets
- All Gender Toilets
- First Aid Kit
- Beware of Horses
- Suggested Stroller & Wheelchair Route
- Emergency Evacuation Point
- Accessible Toilet
- Parenting Room
- Water Tap
- Post Office
- Gift Shop
- Ramps

SCAN THE QR CODE FOR OUR INTERACTIVE MAP



We acknowledge the First Nations of the land upon which Sovereign Hill and Narmbool sit, the Wadawurrung, and their ongoing connection to this land and pay respect to their culture and their Elders past, present and future.