

INNOVATION STATION YEAR 7 – YEAR 8

Students examine and explore the past and present design and technology innovations and solutions at the railway. They learn about the materials, characteristic and properties of different technologies. Students consider advantages and disadvantages of design ideas and technologies including safety and risk. Students undertake a guided workshop and consider design options with society, ethics, economic and social sustainability factors in mind.

STUDENTS WILL LEARN ABOUT:

- Design processes and technology solutions
- Investigate design and technology professions
- Advantages and disadvantages of design ideas and technologies
- The future of biodiversity

SUSTAINABLE TOURISM AT THE RAILWAY VCE (YEAR 11 GEOGRAPHY)

Through the lens of ethical tourism, students evaluate the effectiveness of measures taken at Puffing Billy Railway to enhance the positive impact of the Railway on the surrounding environment. They investigate the growth of tourism and examine management and techniques being used to ensure Puffing Billy Railway is environmentally, socially, culturally, and economically sustainable. Students use fieldwork techniques to gain statistical data from multiple information sources. Students use this information to inform a fieldwork report back at school, analysing the impacts of tourism at Puffing Billy Railway.

STUDENTS WILL LEARN ABOUT:

- The location of the railway, its interconnectedness, and the impact the railway has on people, places, and environments throughout its history.
- Issues and challenges to tourism in the local area and to the railway.
- The impact of Puffing Billy Railway on the local, regional, and national environments, economies, and cultures.

Puffing Billy Railways offers all weather education programs. The students will need appropriate clothing for all conditions (Rain, Hail or Shine). This includes a raincoat, closed-toes shoes, hat and sun protection.

LOCATION:

Meet the Education Officer at Belgrave Station. Journey on Puffing Billy from Belgrave Station to Lakeside Station.

DURATION: 10am – 2pm

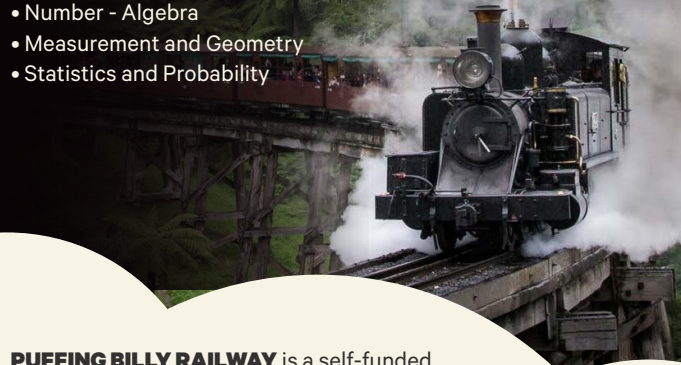


MATHS IN MOTION YEAR 5 – YEAR 8

Students explore Maths concepts in real life situations. Students learn about Measurement and Geometry by developing solutions for the water tanks and understanding the importance of Time at the railway. They develop an understanding of Algebra through patterns and games and explore Statistics and Probability by creating their own survey questions and collecting their own data.

STUDENTS WILL LEARN ABOUT:

- Measurement - Speed/Time
- Number - Algebra
- Measurement and Geometry
- Statistics and Probability



PUFFING BILLY RAILWAY is a self-funded, not for profit organisation dedicated to preserving and sharing its stories, community and environment.

The education programs are linked to The Victorian Early Years Learning Framework (VEYLDF) and The Victorian Curriculum.

Programs are presented by passionate Education Officers who hold level 2 first aid qualifications and Working with Children Checks or are registered teachers.

Puffing Billy Railway Education programs align with the Department of Education and Training excursion ratios. Student to teacher ratios can be found on the PBR website.



PLEASE NOTE

No person will be allowed to sit on the carriage sill during a guided or self-guided excursion.

FOR MORE INFORMATION OR TO MAKE A BOOKING PLEASE CONTACT US ON:

P: 03 9757 0700 **E:** info@pbr.org.au

We acknowledge the traditional custodians of the land, the Wurundjeri and Bunurong people. We pay our respects to their Elders, past, present and emerging.



This publication
is printed on
FSC paper.



EDUCATION PROGRAMS

ENDLESS DISCOVERY



PUFFINGBILLY.COM.AU



ALL ABOARD

KINDER, FOUNDATION – YEAR 2

Develop an understanding and appreciation of place and importance of community. Use your curiosity and imagination to explore technology and stories of the past and present. Undertake a guided workshop at the Lakeside Visitor Centre and meet characters of the railway.

STUDENTS WILL LEARN ABOUT:

- Past and present
- Changes to technology over time
- Importance of place and community
- Biodiversity
- Characters of the Railway
- Push/Pull



STEAM MACHINES

YEAR 3 – YEAR 4

Develop an understanding of natural areas and the importance of protecting places of special significance. Students undertake an Education Officer led workshop and learn about design, materials and tools, to meet community needs.

STUDENTS WILL LEARN ABOUT:

- People in design and technologies occupations
- Force and motion
- Classification
- Suitability of materials, tools and equipment for a range of purposes
- Local community



STEAMING STEM

YEAR 5- YEAR 6

Using the power of STEM based inquiry, examine and explore the past and present design and technology systems of the railway. Students develop an understanding of the logistics, energy sources, skills and systems used to power the train. At Lakeside Visitor Centre students undertake an Education Officer led workshop learning about STEM, materials, tools and innovative ideas to meet community needs, for a sustainable future.

STUDENTS WILL LEARN ABOUT:

- Energy, force, motion
- Materials, tools and equipment for design and technology solutions
- Innovation
- Protecting biodiversity

PUFFING BILLY PATHWAYS

YEAR 9 – YEAR 10

Students evaluate job roles at the railway. They investigate the growth of tourism and examine management and techniques being used to ensure Puffing Billy Railway is environmentally, socially, culturally, and economically sustainable with diverse opportunities for young people in the future.

STUDENTS WILL LEARN ABOUT:

- Characteristics contributing to achieving personal, social, educational, and professional goals
- Relationships between work, community and economy
- Technological advances impact on work roles in the community
- Challenges and opportunities to employment and volunteering at the railway

