

#### **PUFFING BILLY RAILWAY PRE- EXCURSION RESOURCES**

## STEAMING STEM PROGRAM

## WHERE IS THE WILD?



Level 5 - Level 6

## **C** ACTIVITY DESCRIPTION

Students explore and discover biodiversity and create their own map of Victoria. Using the new Department of Land Water and Planning (DELWP) online NatureKit, students explore the web mapping and reporting tool to learn about biodiversity. They develop spatial thinking skills and build knowledge of the world around them.

## **THEME**

- Biodiversity
- Mapping

## **MATERIALS REQUIRED**

- Access to computers and the internet
- NatureKit
   http://maps.biodiversity.vic.gov.au/ viewer/?viewer=NatureKit
- Scissors
- Map of Victoria One for each student
- Black fine liners
- Pencils
- Ruler
- Sticky tape
- Tracing paper for Map overlays

## (a) INSTRUCTIONS

Either individually or in groups, access Naturekit on the computer. Naturekit is a free, online mapping tool which provides an insight into Victoria's biodiversity. Students will need at least one lesson just to explore the site. While students are exploring the site, write the following dot points on the white board for students to complete.

- Using different scales, locate their school, surrounding suburbs
- Locate Victoria's major towns Melbourne, Geelong, Mildura, Bairnsdale, Horsham
- Find the Southern Ocean, Tasman Sea, Bass Strait
- Look at the different types of vegetation
- Explore the Species Survey Records
- Compare the pre 1970's Ecological Vegetation Class (EVC) with 2005 EVC
- Find Belgrave, where their Puffing Billy Journey will commence
- Consider strategic biodiversity values

Once students are familiar with the Naturekit site introduce the mapping task. Using the map provided of Victoria as the base map, students develop mapping skills by drawing different overlays of vegetation, an animal species and different towns.

Hand out the "Mapping Task Instructions. Discuss each of the instructions with the whole class to clarify the information and answer any student questions. Ensure the students have all the materials they need to complete the task.

Students will learn about location and directions and be encouraged to use directional language.



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# SUGGESTIONS FOR ASSESSMENT

Ability to work independently and in small groups when working on the computers.

The completed mapping task including the overlays.



#### **THE HUMANITIES - GEOGRAPHY**

Collect and record relevant geographical data and information from the field and secondary sources, using ethical protocols (VCGC088).

Represent the location of places and other types of geographical data and information in different forms including diagrams, field sketches and large-scale and small-scale maps that conform to cartographic conventions of border, scale, legend, title, north point and source; using digital and spatial technologies as appropriate (VCGGC089).

Interpret maps and other geographical data and information using digital and spatial technologies as appropriate, to develop identifications, descriptions, explanations and conclusions that use geographical terminology (VCGCO90).



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#### MAPPING TASK INSTRUCTIONS

- 1. On the map provided of Victoria go over the border with a black fine liner, so it stands out.
- 2. Shade the ocean with a blue pencil.
- 3. Shade New South Wales and South Australia in purple pencil.
- 4. Add the North, South, East and West compass points.
- 5. Cut out 2 pieces of tracing paper so they are the same size as the map.
- 6. Trace the Victorian border with a black fine liner on all three pieces of tracing paper.
- 7. Use an Atlas or Map of Victoria. On the map provided, label the following towns with a red dot and their names.
  - Melbourne, Geelong, Mildura, Portland, Bairnsdale, Shepparton, Horsham

- 8. Draw the Puffing Billy Railway line from Belgrave to Gembrook.
- On the first piece of tracing paper, add the title "Victorian Vegetation Types". Using the information from Naturekit, shade the following areas in green; Dry Forests, Damp Forests, Wet forests. Montane woodlands/grassland/shrublands and Sub alpine woodlands/grassland/shrublands.
- 10. In orange shade the Mallee vegetation areas.
- 11. In red shade the Heathland vegetation areas.
- 12. Don't forget to add a key on the map to show what the green, orange, red and purple mean!
- 13. On the second piece of tracing paper research at least one animal species such as Ring-tailed Possum, Platypus, Echidna or Kangaroo. Use a different colour to shade in where the species are found in Victoria. Remember a title and a key. To finish, add some sticky tape to keep your maps together.

