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## Memorial Park 3 Video Answers

# Tuesday 11 November 2014

## 1. Memorial Park Project Update

Catch up with Russell Scoones on the steps of the National War Memorial as he gives you a rundown of progress on the Memorial Park project since the last field trip in May 2014.

- 1. List some of the changes Russell mentions.
  - Tunnel roof finished; roading finished; tunnel electrical and mechanical systems finished.
- 2. Why is today significant?
  - Armistice Day.

Next step learning: Have a look at some videos from the second *Memorial Park* field trip to get more of an idea on the progress that has been made since last May.

#### 2. Drive Through the Arras Tunnel

It is time now to take a drive through the new Arras Tunnel.

- 1. Although currently blank, what has the electrical sign been showing?
  - That cyclists and pedestrians cannot go through the tunnel.
- 2. What is special about the lighting in the tunnel?
  - They can be controlled depending on the light conditions outside the tunnel.
- 3. What do the poppies represent?
  - The soldiers who died at Gallipoli.

Next step learning: Sketch part of the Arras Tunnel. Compare Arras Tunnel with other tunnels you know of.

## 3. New Road to Arras Tunnel

Site Engineer Rob Dickson explains how a whole new piece of road had to be put in place to take traffic into the tunnel.

- 1. Where are you right now?
  - Corner of Buckle and Sussex Street.
- 2. What does the polymer modification in the bitumen help with?
  - Longevity (ie the road surface will last a long time).
- 3. What happened to the traffic on the night when the road leading into the tunnel had to be completed before opening?
  - It was diverted through town.

Next step learning: Find out if a State Highway project is happening near your town <a href="http://nzta.govt.nz/network/projects/results.html">http://nzta.govt.nz/network/projects/results.html</a>.





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### 4. Remote Traffic Operations

Out in Johnsonville there is a very interesting building known as TOC. Get special permission to go inside and find out all about it.

- 1. What does TOC stand for?
  - Transport (actuallyTraffic) Operations Centre.
- 2. What "happens" at the Centre?
  - Cameras are monitoring the road networks in order to keep drivers safe.
- 3. Is TOC responsible for monitoring drivers breaking the law?
  - No but they can assist the police if needed.

Next step learning: Find out more about TOC here http://www.nzta.govt.nz/resources/how-the-nzta-keeps-you-moving/docs/how-the-nzta-keeps-you-moving.pdf.

## 5. Tunnel Control with Smart Software

It's Wayne's World – but not as you might know it! This is more to do with clever software helping traffic operations.

- 1. Operators at TOC are able to control cameras in the Arras Tunnel to pan, t\_\_\_\_\_ and z\_\_\_\_. Fill in the missing words.
  - Tilt and zoom.
- 2. What can the "intelligent cameras" tell operators?
  - If a vehicle has stopped, if something falls off a vehicle, if a cyclist or pedestrian is going through the tunnel.
- 3. What happens if the system picks up an incident?
  - An alarm is set off to alert the operator.

Next step learning: Create a flow chart to show your understanding of how this operating system works.