

## THE GRAND TOUR OF AUSTRALIA (PART 2)

### AIM

- To use maths as a means for students to follow their individual and class progress as active travel participants in The Grand Tour of Australia.

VELS: Level 4

GRADE: 5 - 6

- **Mathematics**

They organise and present data, using displays such as simple frequency tables and histograms. They calculate and interpret measures of centre (mean, median and mode) and spread (range) for ungrouped data.

**Mean:** The sum of values in a data set divided by the total number of values in the data set.

**Median:** The middle value of a data set when its elements are arranged in numerical order.

**Mode:** The *most common* value in a data set.

### DURATION (Approximate) 1hr

- 20mins: [Active Travel: Class Progress Graph](#)
- 20mins: [Maths Magic sheet](#)
- 20mins: [Maths Magic Extension Activity](#)

### LINKS

- [The Grand Tour of Australia \(PART 1\)](#)
- [Back to contents page](#)



# THE GRAND TOUR OF AUSTRALIA (PART 2)

## LESSON NOTES

### EQUIPMENT

- Photocopy 1 per student:
- [Active Travel: Class Total Sheet](#) (Completed as part of The Grand Tour of Australia PART 1)
- [Active Travel: Class Progress Graph](#). (Example Graph & Template)
- [Maths Magic](#) sheet
- [Maths Magic Extension Sheet](#).
- Calculator (optional)
- Colored pencils.

### LESSONS

- 1) Students graph results from [Active Travel: Class Total Sheet](#) onto the [Active Travel: Class Progress Graph](#) template. (An example graph has been provided for the teacher).
- 2) Students use the graph to answer the questions on the [Maths Magic](#) sheet.

### Suggestions:

- Students could convert their answers to Q1 and Q2 to fractions or percentages on the [Maths Magic](#) Sheet.
- Create a pie chart using the results from the **Type of Active Travel** column on the [Active Travel: Class Total Sheet](#).

### EXTENSION

- 3) Students can complete the [Maths Magic Extension Activity](#). This could be completed individually or as a whole class activity.

**Suggestion:** Hold a follow-up class discussion on the comments written by students for Question 4 on the [Maths Magic Extension Activity](#).

*For more detailed information on vehicle operating costs for the Maths Magic Extension Sheet, visit: My Car/Operating Costs at: [www.racv.com.au](http://www.racv.com.au)*




# THE GRAND TOUR OF AUSTRALIA!!!

## Maths Magic

- 1) Graph the **Total distances** from the Active Travel: Class Total Sheet onto your Active Travel: Class Progress Graph.

Look at the Active Travel: Class Progress Graph to answer the following questions.

- 2) How many people actively travelled to school this month? \_\_\_\_\_ 

- 3) How many people did not actively travel to school this month? \_\_\_\_\_

- 4) What was the:

- a) Greatest active travel distance covered this month? \_\_\_\_\_

- b) Smallest active travel distance covered this month? \_\_\_\_\_

- c) Total active travel distance covered by the whole class? \_\_\_\_\_

- 5) Look at the **total distances** covered this month and calculate the:

- a) Mean (Average distance): \_\_\_\_\_


- b) Median (The middle value): \_\_\_\_\_

- c) Mode (Most common value): \_\_\_\_\_


# THE GRAND TOUR OF AUSTRALIA!!!

## Maths Magic Extension Activity

 *On average, a car travels 10km per litre of fuel.* 

1) Work out approximately how many litres of fuel were saved this month from students riding or walking to school. \_\_\_\_\_ 

2) What is the current cost of petrol per litre?  \_\_\_\_\_ 

3) How much money was saved this month from students actively traveling to school?  \_\_\_\_\_

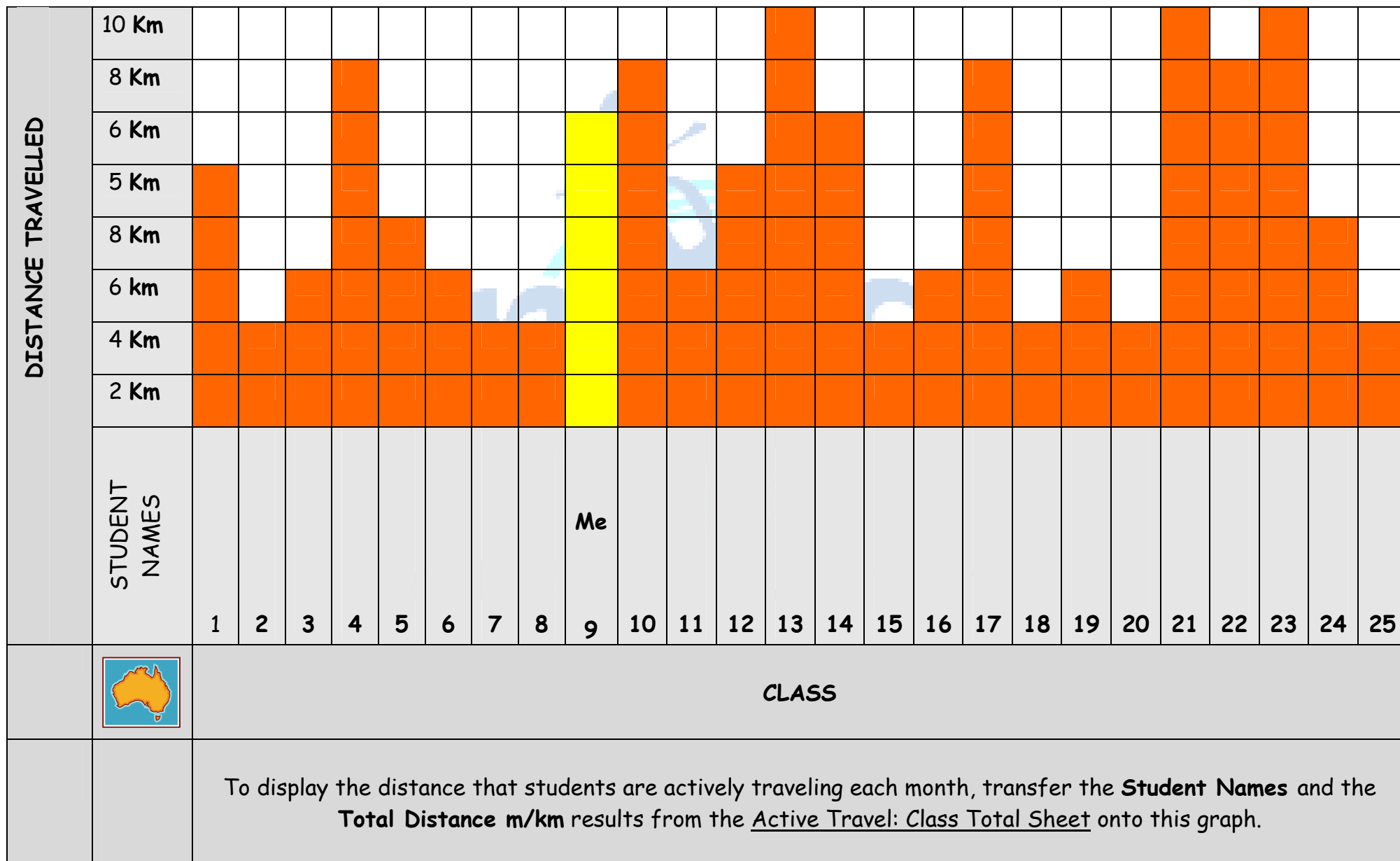
4) Write down some environmental and health problems that can occur from many people using cars to travel to school.

 a) Environmental Problems: \_\_\_\_\_

 b) Health Problems: \_\_\_\_\_

 5) List some benefits of actively travelling to school: \_\_\_\_\_

## ACTIVE TRAVEL: CLASS PROGRESS GRAPH (EXAMPLE)







[ride2school.com.au](http://ride2school.com.au)