MATHEMATICS ACHIEVEMENT CHALLENGE - TRAVEL

Read through all activities, choose two  from section A and three  from section B

SECTION A

Select and complete THREE  **out of FOUR from this section.**

1.  Investigate what NZ$100 is worth in ten other currencies
    a. List the countries of your choice, record the currency used by each and show the value of NZ$100 for each

2.  Plan a trip from your school to a place of interest in your nearest town or city
    a. Display your route, forms of transport, times taken for travel and the cost to get there
    b. Prepare a report to share with your class

3.  On a time line, mark the significant events that relate to transport/travel in New Zealand over the last 150 years
    a. Choose 2 towns/cities in New Zealand (one in the North Island and one in the South Island
    b. List the travel options between these two places.
    c. Analyse each mode of travel; cost, speed, convenience, and compare the time taken to get there.
    d. Use diagrams to show your findings and your conclusions.

4.  Congratulations! You have just won $5000. Plan and cost a wonderful holiday for your family, within New Zealand.
    a. Consider spending money, travel times and distances, costs, baggage. Route(s) taken, places visited, transport, etc.
    b. Display your planning and final decisions clearly.

SECTION B

Select and complete THREE  **out of SIX from this section.**

1.  Investigate different aircraft capacities.
    a. Analyse and report on weight of passengers, baggage weight and volume, fuel needed for a journey, and the weight of it for different types of planes.
    b. Present your findings using graphs and diagrams.

2.  Plan a cycle trail, in the area in which you live, that would take at least one hour to complete.
    a. Map the route and mark the highlights and distances from the start to the finish.

3.  Choose 5 major cities in Australia and determine the travel time, costs, distances and routes to each, from your nearest New Zealand airport. Present your findings using text and diagrams

4.  Investigate and make a display of 20 examples of universal signs (e.g. road, animals, train, Red Cross, nuclear hazard, peace etc.). Select 8 of these and produce an accurate drawing of each one to fit on A5 paper.
Enlarge 2 of these to A3 size

5.  Design an orienteering course (using compasses if available), around your school and/or district.
    a. Produce maps, clues and directions.
    b. Set this course up for your class and evaluate the results.

6.  Research the history of number plates and registration in New Zealand. How many cars are registered each year?
    a. What codes are used, and how can you tell how different number plates relate to different years?
    b. Which number plates will be in operation by the end of this year?
    c. Create a visual display of your data.