**Practice SAC Unit 1, Outcome 1**

Are we becoming less healthy? Asthma is a respiratory condition affecting the airways of the lungs, causing episodes of wheezing, breathlessness and chest tightness due to the narrowing of the airways. Asthma affects people of all ages and can usually be managed through effective treatment. The Excel tables show data relating to asthma and other long term health problems. The data originates from the Australian Bureau of statistics, who have asked you to prepare some charts to show how these diseases affect our community.

**1. DESIGN: (4 MARKS)**

 Using the blank template given, sketch a layout diagram for the **spreadsheet** that will show the following;

* In Table 1, show how you could validate your data so you can only enter decimal numbers less than 20
* In Table 2 in the Total overseas born row (row 22), show how you will calculate the totals for each disease.
* In Table 3, next to the 2011-12 column, show how you will display the word “increased” if the figures have increased since 2007-8. If it hasn’t, then it should show the message “decreased”.

On a blank sheet of paper, sketch a layout diagram for **any two of your charts** from the following list: N.B. YOU MUST SHOW TWO DIFFERENT TYPES OF CHART.

* the age groups of males who have asthma in 2011-12 (Chart A)
* A comparison of asthma, arthritis and deafness for people born in Australia as compared to people born overseas. (Chart B)
* Show the %s of asthma rates for people born in each geographical region excluding Australia. (Chart C)
* Has the number of people with long term conditions increased between 2007-8 and 2011-12? Produce **one** chart showing **asthma and one other condition** that would support this theory. (Chart D)

The designs for the spreadsheet and the charts are to be given to Mrs Bane **before** you start work on the computer.

**2. DEVELOPMENT: (10 MARKS)**

* Produce your spreadsheet and charts based on your layout diagrams above
* Print out the spreadsheet, on “normal view” and “formula view”.
* Print the four charts on **separate sheets.**
* Make sure your name is on each page before you print.

**3. TESTING: (3 MARKS) & EVALUATION (3 MARKS)**

* Test your spreadsheet solution. Show **in Word** how you tested your validation message, spreadsheet and graphs. (see p 32 – 37 if you get stuck!)
* What conclusions can be drawn about the incidence of asthma? Draw on the data from your charts to support your answer. Who would need this information and what would they use it for?
* Print out your Word document.

**Hand in checklist: (tick off each one as you print it out and put it in your plastic pocket).**

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| Spreadsheet design (Hand drawn)  |  |
| Chart 1 design (Hand drawn) |  |
| Chart 2 design (Hand drawn) |  |
| Spreadsheet on normal view |  |
| Spreadsheet on formula view |  |
| Chart A |  |
| Chart B |  |
| Chart C |  |
| Chart D |  |
| Testing & Evaluation (Word document) |  |