Name: _____ Class: _____ Date: _____

Year 7 Pre-Test Investigating data and Statistics

Decide on the following 5 scenarios if it is a **Primary or Secondary data collection?**

1. The Cronulla Sharks sports scientist gathers data on the moisture levels of their players during training.

2. The Sydney Roosters use data collected by Channel 9 sports to establish the supporter population.

3. A University measured training energy levels of female rugby union players. The National Rugby League used that data to create guidelines for their new female competition.

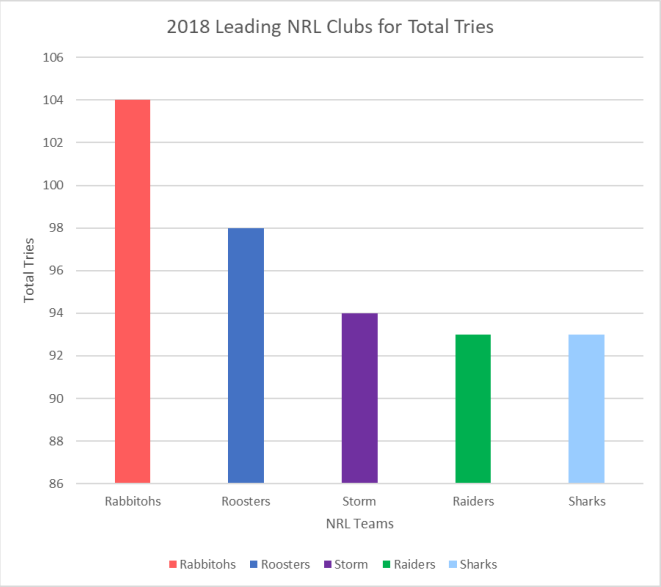
4. The NSW Blues State of Origin Team use data collected by their marketing team to work out how many blue supporter wigs must be ordered for this years Origin series.

5. The Australian Kangaroos team doctor used some data gathered by a player's own team to decide if that player was fit to play in the World Cup.

6. Can data gathered by a secondary source be trusted?

Use the space below to explain you thoughts and reasoning.

7. Would a Rugby league club be more likely to trust Primary or Secondary data relating to their own player performance? Explain your reasoning.



8. What is the total number of tries scored by top 5 Try scoring teams?

9. Does this graph display the 'mean' tries for each of the 5 teams? Explain your reasoning.

10. Calculate the 'mean' of the total tries scored by all teams.

11. Which teams scored less than the mean of tries scored by the top five teams?

12. If the next 5 teams in 'Leading Try Scorers' were added to this graph would the 'mean' get larger or smaller? Explain your reasoning.

13. With 3 more teams statistics added to the data in the graph, calculate what the new range would be.

Eels: 87, Dragons: 87, Cowboys 84

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14. The most frequent number in a data set is called:

A. ☐ range

B. ☐ Bi-modal

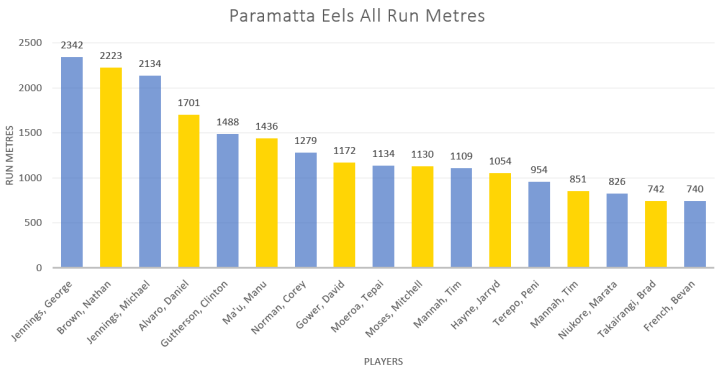
C. ☐ average

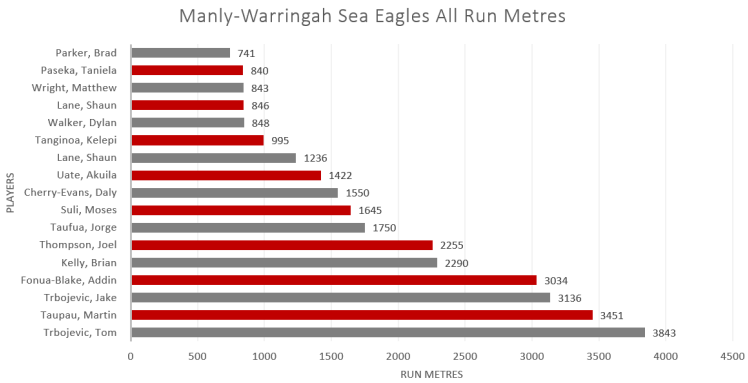
D. ☐ mode

15. Calculate the **'mode'** of the following penalties data of 25 players.

3,2,1,7,5,1,3,28,10,8,1,13,0,4,7,1,8,0,0,10,0,3,4,1

16. Calculate the **'range'** of the penalties data above.





17. Using the tables above which teams appears to have a higher total run metres and why?

18. Calculate the 'mean' using the Manly run metre data on their top 5 players?

19. Calculate the 'median' of both teams data, who has a higher median?

20. Name players from each team closest to the median for each team.

21. What is the difference between the 'Range' of each teams 'Total Run Metres' data? Show your calculations.

22. The coach of the Gold Coast Titans was trying to make a selection of a player on his team for the next game.

You will need to calculate which is the better choice using Mean, Median, Mode or Range. Select the measurement that would provide the coach the most valuable information.

Complete your calculations and write an explanation for the coach on which player he should select.

A. Brenko Lee:

Run Metres	**92**	**83**	**119**	**X**	**86**	**X**	**110**	**88**

X = Did not play

B. Anthony Donn:

Run Metres	**87**	**100**	**90**	**76**	**112**	**81**	**67**	**102**

Explanation: