**Time Series Marking Rubric** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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|  | **Achieved** | **Merit** | **Excellence** |
| **Purpose/Research** | Purpose Stated  Selected variable | + evidence of research  Justified choice of variable (s) | + discussion of context/research in developing purpose & selecting variable(s) |
| **Graph** | Graph with raw & smoothed line (trend line) | Graph with smoothed line (trend line)  + title, correctly labelled axes and any series shown on the graph clearly identified | |
| **Model** | Appropriate model decomposition (or re-composition) graph shown and briefly discussed  OR graph of smoothed data | + appropriateness of model is discussed throughout the range of x-values  (evidence can be found in discussion of forecast accuracy) | +consider other models eg piecewise or multiplicative  OR remove last values and check forecast as a way to justify the model |
| **Features** | 2 or more features of the time series discussed in context.  eg long term trend  Seasonal variation  Residuals | | + other relevant features identified  + discussion of features in context linking to research & possible explanations |
| **Forecast** | Forecast made using iNZight. Single value or interval | + forecast in context with correct units and appropriate rounding  +discussion of accuracy of forecast linked to statistical evidence  +demonstrated understanding that the forecast is an estimate | + comparison with real data  OR remove last values and check forecasts |
| **Conclusion** | Conclusion consistent with the purpose | + contextual support for the conclusion  + each component of PPDAC cycle communicated | +conclusion linked to purpose using contextual references throughout report  +reflection wrt findings and research  + review impact of findings or compare with other time series |
| **Final Review for Excellence** |  |  | Integrated statistical knowledge and contextual knowledge |
| **Overall Grade** | **Achieved** | **Merit** | **Excellence** |