Progression table for class use

The table below can be used for:

* sharing the aims of your work
* self- and peer-assessment
* helping you review your work and improve on it.

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| **Representing**  *Identifying relevant mathematical aspects and knowledge that might be needed, and formulating suitable approach* | **Analysing**  *Analysing available data, working logically, and calculating accurately to produce a solution* | **Interpreting and evaluating**  *Interpreting the results of calculations and design decisions in developing the final design* | **Communicating and reflecting**  *Communicating and justifying decisions and designs clearly* |
| Simple images are used to explore the situation | Makes some attempt to identify seating positions or dimensions | Presents a simple design that satisfies some of the basic criteria | Produces a simple sketch of the table with some indication of seating positions or dimensions |
| P_ArrowUses simple forms of representation with some appropriate mathematical aspects, such as dimensions, identified | Uses images with some relevant dimensions indicated  Uses basic body measurement data | Uses some of the data to design a table with appropriate dimensions  Relates design to the original problem, e.g. by showing how the table can accommodate different numbers of people | Presents a simple design that meets the basic principles of the task  Includes plan, elevation and dimensions |
| Identifies the mathematical aspects of the task and connects them to their mathematical knowledge to design a table | Evidence of choosing relevant data to calculate dimensions  Uses appropriate and accurate mathematical diagrams, e.g. plans and elevations | Justifies choice of relevant data  Considers how choice of data/dimensions affects design of table | Presents an appropriate design that meets the task criteria with some explanation for the choice of features and dimensions  Shows a clear method of table extension |
| Carefully considers the data required to create a sophisticated design, and uses a selection of math-ematical information, methods and tools | Uses clear, detailed and accurate plans and elevations  Uses accurate calculations based upon the analysis of data | Takes full account of the relevant data  Checks the appropriateness of solutions and conclusions  Justifies how these led to design of table | Fully explains choice of design and the selection of all dimensions  Describes issues to be considered when the table is in use |