**Sandcastle ratios**

**Rubric**

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| **Criteria** | **Beginning** | **Achieved** | **Exceeded** |
| Investigation method | The method identifies and controls some variables. | The method identifies and controls variables to ensure a fair test.  | The method identifies and controls variables and considers best equipment to reduce measurement error.  |
| Investigation findings | Data is represented in a table. A ratio is identified.  | Data is represented in a clear table and trends are identified. A final best ratio is identified.  | Data is represented in a clear table. Trends and possible errors are identified. A final best ratio is identified and justified.  |
| Investigation report | The report includes key information.  | The report provides enough detail for the method to be reproduced and results compared.  | The report provides enough detail for the reader to understand the limitations of the experiment and assess the reasonableness of the findings.  |
| Design process story  | Sketches and photos show the process of building the sandcastle.  | Sketches and photos show iteration and the evolution of design ideas.  | Sketches and photos show iteration, problem-solving and the evolution of design ideas.  |