**NORTHMEAD CAPA HIGH SCHOOL**

Creative Process PBL Assessment Task: Year 8

**Due Date: Week 3 Term 4, FRIDAY: 27/10/17**

**Driving question: How would the world function without measurement?**

**GOOGLE CLASSROOM CODE: ks9zw5**

**TASK**

Each day, new products are designed and produced all over the world. Your task is to design and create a product dependent upon the class you are in this semester (see below to confirm your class specification).

**Food Technology** - design and manufacturing of a food packaging.

(Students in food technology will be required to make the food item in a practical lesson.)

**Textiles** - design and manufacturing of a cushion

**Wood Work**- design and manufacturing of a jewellery box

You will be asked to complete a design folio with respect to the design specialisation studied. The folio component will be separated into group (**no more than 3 students**) and individual tasks.

You will also be asked to complete your own scale drawing of your final product with regards to the design specialisation studied.

**CLASS CONTEXT AREA**

Food Technology – 8THE.4, 8THE.7

Textiles – 8THE.3, 8THE.6, 8THE.9

Wood - 8TIA.1, 8TIA.2, 8TIA.5, 8TIA.8, 8TIA.10

**SKILLS**

* The use of specific tools and techniques will be taught and demonstrated with relevance to the appropriate design specialisation studied in class time throughout the project.
* Skills taught to complete the project include, application of the design process, collaboratively creating the design and evaluation of the process.
* Use of rates and ratios in the real world.
* Demonstrates the knowledge of ratios with the use of scale drawing and other real life applications within the project

**LESSON ALLOCATION**

**Mathematics** - approximately 2 lessons to teach cost analysis and the technique of pictorial and scale drawing

**TAS** – 3 lessons shared between 22/6 and 26/6. Practical and theoretical lessons throughout regular timetabled classes Term 3 to the due date (27/10).

(PRACTICAL DATE FOR STUDENTS COMPLETING THE FOOD TECHNOLOGY CONTEXT AREA WILL BE ADVISED BY THE TEACHER. Please note students are to provide their own ingredients)

**EXHIBITION OF WORK**

The finished works will be open for inspection to the public on the day following the marking of the projects.

**Outcomes:**

**Technology and Applied Studies:**

4.1.1 Applies design processes that respond to needs and opportunities in each design project (FOLIO)

4.2.1 Generates and communicates creative design ideas and solutions (FOLIO)

4.3. 1 Applies a broad range of contemporary and appropriate tools, materials and techniques with competence in the development of design projects (PRACTICAL)

4.5.1 Applies management processes to successfully complete design projects (FOLIO)

4.5.2 Produces quality solutions that respond to identified needs and opportunities in each design project (PRACTICAL) 4.6.1 Applies appropriate evaluation techniques throughout each design project (FOLIO)

**Mathematics**

MA4 -2WM Applies appropriate mathematical techniques to solve problems

MA4-1WM Communicates and connects mathematical ideas using appropriate terminology, diagrams and symbols

MA4- 7NA Operates with ratios and rates, and explores their graphical representation

MA4-5NA Operates with fractions, decimals and percentages

**Maths Component**

Mathematics content requirements for the portfolio

* Evidence of understanding of ratios and scale factor
	+ Original values measured correctly and clearly written in tables provided
	+ Scale calculations completed correctly
	+ Scale diagram drawn meaningfully, clearly stating the scale factor

**Marking rubric**

|  |  |
| --- | --- |
| * Uses the Design folio to thoroughly and effectively document measurements and represent it with an appropriate scale diagram, in the respective area of TAS
* Detailed understanding of scale drawing with the most appropriate representation and scale factor
* Detailed and accurate calculations to support cost analysis
 | 13-15 |
| * Uses the Design folio to thoroughly document measurements and represent it with an appropriate scale diagram, in the respective area of TAS
* Sound understanding of scale drawing with the most appropriate representation and scale factor
* Detailed calculations to support cost analysis
 | 10-12 |
| * Uses the Design folio to document measurements and represent it with an appropriate scale diagram, in the respective area of TAS
* Some understanding of scale drawing with the most appropriate representation and scale factor
* Some calculations to support cost analysis
 | 7-9 |
| * Inconsistently uses the Design folio to document measurements and represent it with an appropriate scale diagram, in the respective area of TAS
* Inconsistent scale drawing which does not comply with the scale factor
* Attempts calculations to support cost analysis
 | 4-6 |
| * Attempts to use Design folio to document measurements and represent it with an appropriate scale diagram, in the respective area of TAS
* Lacks understanding of scale drawing and/or scale factors which does not comply with the scale factor
* Limited calculations to support cost analysis
 | 1-3 |