

## NORTHMEAD CAPA HIGH SCHOOL

### Creative Process PBL Assessment Task: Year 8

Due Date: Week 10 Term 1 (last TAS class of the week)

Driving question: How would the world function without measurement?

GOOGLE CLASSROOM CODE: 5qw6f6d

#### **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.

You will 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 complete your own scale drawing of your final product.

#### **CLASS CONTEXT AREA**

Food Technology – 8THE.2, 8THE.3, 8THE.7, 8THE.10

Textiles - 8THE.8, 8THE.11

Wood - 8TIA.4, 8TIA.5, 8TIA.6, 8TIA.9

Metal - 8TIA.1

#### **SKILLS**

- The use of specific tools and techniques relevant to the appropriate design specialisation studied.
- Application of the design process, collaboratively creating the design and evaluation of the process.
- Use of rates and ratios in the real world.
- Ratios with the use of scale drawing and other real-life applications within the project

#### **LESSON ALLOCATION**

**Mathematics** - approximately 4 lessons to teach budgeting, rates and ratios, cost analysis and the technique of pictorial and scale drawing

**TAS** – Practical and theoretical lessons throughout regular timetabled classes Term 1 to the due date.

#### **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**

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

MA4 -2WM Applies appropriate mathematical techniques to solve problems

MA4-2WM Recognises and explains mathematical relationships using reasoning

# **Marking rubric**

	The contribution of the design of the second and th	
•	Thoroughly applies design processes that respond to needs and opportunities in each design project	
•	Provides an extensive analysis of creative design ideas and solutions.	
•	Provides a deep understanding of a broad range of contemporary and appropriate tools, materials and techniques with	
	competence in the development of design projects  Extensively applies management processes to successfully complete design projects	
•	Produces superior quality solutions that respond to identified needs and opportunities in each design project	85-
•		100
•	Applies thorough evaluation techniques throughout each design project	
•	Effectively documents measurements and represents them with an appropriate scale diagram  Detailed understanding of scale drawing with the most appropriate source part and scale factor.	
•	Detailed understanding of scale drawing with the most appropriate representation and scale factor	
-	Detailed and accurate calculations to support cost analysis, budgeting and wastage  Provides a comprehensive understanding of design processes that respond to needs and opportunities in each design	
•	project	
•	Generates and communicates a variety of quality creative design ideas and solutions	
	Applies a comprehensive range of contemporary and appropriate tools, materials and techniques with competence in	
	the development of design projects	
	Applies good management processes to successfully complete design projects	70-
•	Produces good quality solutions that respond to identified needs and opportunities in each design project	84
•	Applies comprehensive evaluation techniques throughout each design project	
•	Thoroughly documents measurements and represents them with an appropriate scale diagram	
•	Sound understanding of scale drawing with the most appropriate representation and scale factor	
•	Detailed calculations to support cost analysis, budgeting and wastage	
•	Applies design processes that respond to needs and opportunities in each design project	
•	Generates and communicates a variety of creative design ideas and solutions	
•	Applies a broad range of contemporary and appropriate tools, materials and techniques with competence in the	
	development of design projects	
•	Satisfactorily applies management processes to successfully complete design projects	
•	Produces satisfactory solutions that respond to identified needs and opportunities in each design project	50-
•	Applies appropriate evaluation techniques throughout each design project	69
•	Documents measurements and represent them with an appropriate scale diagram	
•	Some understanding of scale drawing with the most appropriate representation and scale factor	
•	Some calculations to support cost analysis, budgeting and wastage	
•	Provides a limited understanding of the design processes that respond to needs and opportunities in each design project.	
•	Generates minimal creative design ideas and solutions.	
•	Applies a small range of contemporary and appropriate tools, materials and techniques in the development of design	
	projects.	
•	Provides a basic understanding of management processes to successfully complete design projects.	
•	Produces basic quality solutions that respond to identified needs and opportunities in each design project	35-
•	Applies basic evaluation techniques throughout each design project	49
•	Inconsistently documents measurements and represent them with an appropriate scale diagram	
•	Inconsistent scale drawing which does not comply with the scale factor	
•	Attempts calculations to support cost analysis, budgeting and wastage	
•	Provides minimal understanding of the design processes that respond to needs and opportunities in each design project.	
•	Generates and communicates limited design ideas and solutions	
•	Applies a limited range of contemporary and appropriate tools, materials and techniques in the development of design projects	
•	Applies minimal management processes to complete design projects	
•	Produces limited solutions that respond to identified needs and opportunities in each design project	0-
•	Applies limited evaluation techniques throughout each design project	34
•	Attempts to document measurements and represent them with an appropriate scale diagram	
•	Lacks understanding of scale drawing and/or scale factors which does not comply with the scale factor	
•	Limited calculations to support cost analysis, budgeting and wastage	
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