



# BURGMANN ANGLICAN SCHOOL

Year Six Math Medal Task

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This template is in wide-screen format and demonstrates how transitions, animations, and multimedia choreography can be used to enrich a presentation.

# OUR MISSION

## Our Mission

- In the middle school context

## The Task

- Math Olympic Medal

## The Tools Used

- Quiver: Augmented Reality
- Makers Empire: CAD software
- 3D printing and model making

## Student Outcomes



## Outline Presentation

### Our Mission

- Timeframe
- 3D printing at our campus

# THE TASK

## Brief

Congratulations, your medal design company has been asked to submit a design for the 2016 Rio Olympics. Your design should include a variety of prisms and/or pyramids. The complexity of your design will determine if your design is suitable as a gold, silver or bronze medal.

## Design Criteria

GOLD: A complex design made up of composite shapes, using positive and negative spaces.

SILVER: A design made up of complex or composite shapes.

BRONZE: A design made using a basic shape

## Design Restriction

- No Circles
- No larger than 8cm Width x 8cm Length x 4cm Height



Modified – Keep in Context (Commonwealth, Athletics Carnival, Swimming, World Cup, etc.)

Differentiation

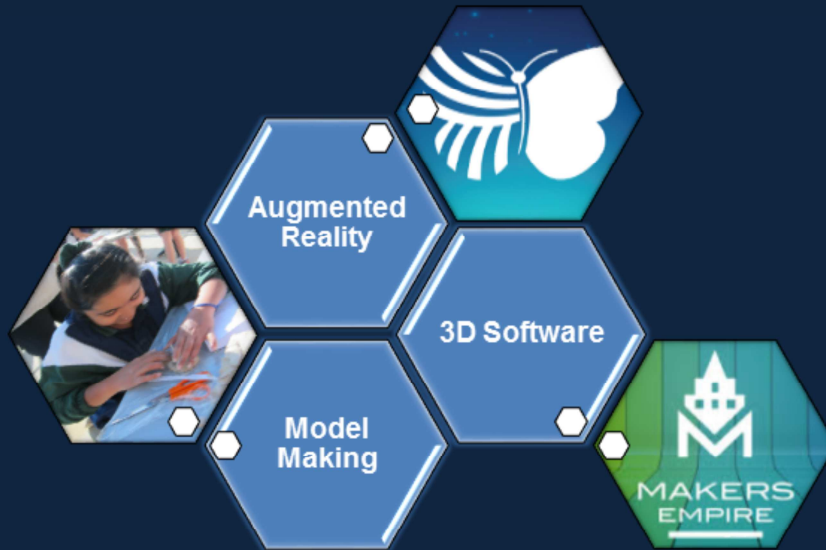
## HOW DOES IT RELATE TO MATH?

In a booklet provided students, they had to use their medal to identify and calculate the following:

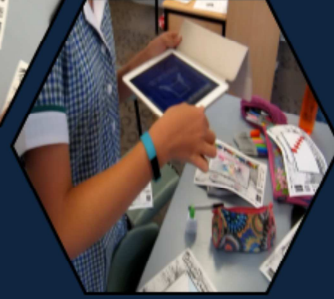
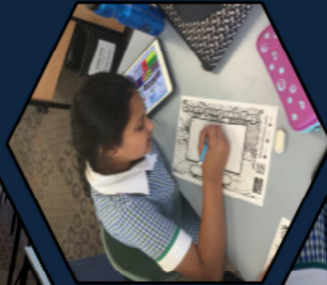
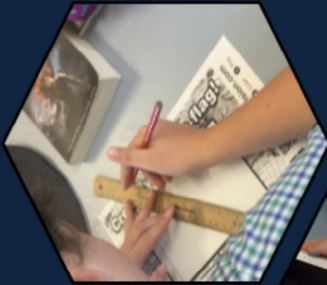
- **Identify 3D Shapes**
- **Perimeter**  
Finding the perimeter of the base shape
- **Area**  
Find the area of one face from model
- **Volume & Capacity**  
Calculating how many mL of liquid gold would be needed to create their medal



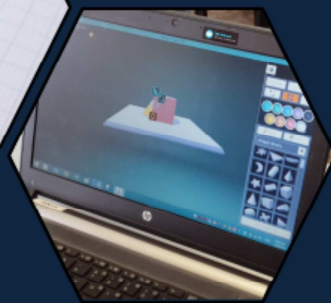
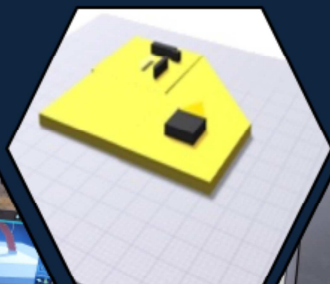
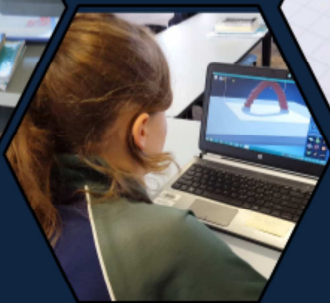
## THE TOOLS WE USED IN THE CLASSROOM



# IDENTIFYING 2D SHAPES USING AUGMENTED REALITY



# CREATING 3D SHAPES AND DESIGNING MEDALS USING CAD & 3D PRINTING SOFTWARE



## CREATING MEDALS





## SHOWCASING WORK

