



**NCCA**

An Chomhairle Náisiúnta  
Curaclaim agus Measúnachta  
National Council for  
Curriculum and Assessment

# Junior Cycle Graphics Classroom-Based Assessment 2: Example of Student Work 02

January 2024



## Geometry of a candle holder

Graphics CBA 2



## Research

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### Primary Research

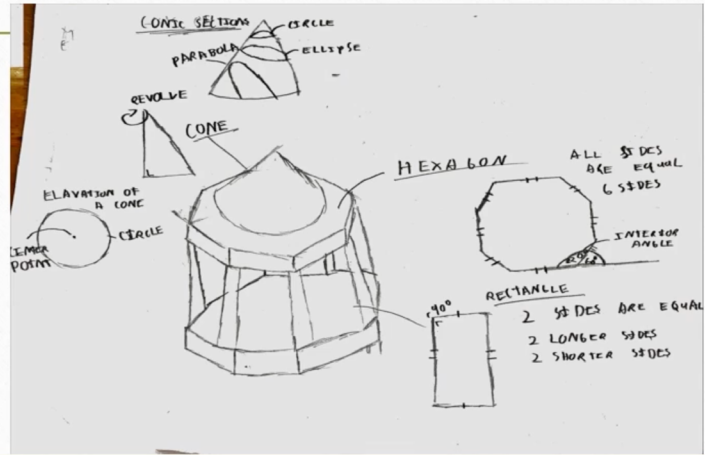
- I found a lantern candle holder at home and used it as one of my examples

### Secondary Research

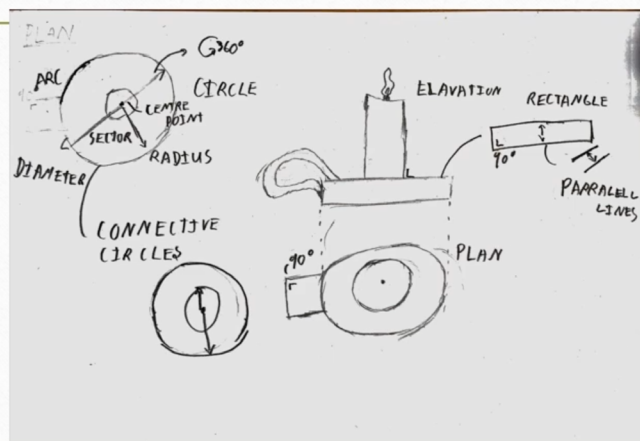
- I looked up candle holders online and found a suitable candle holder to use as my secondary example



## Candle Holder 1



## Candle holder 2





## Similarities and differences

### Candle Holder 1

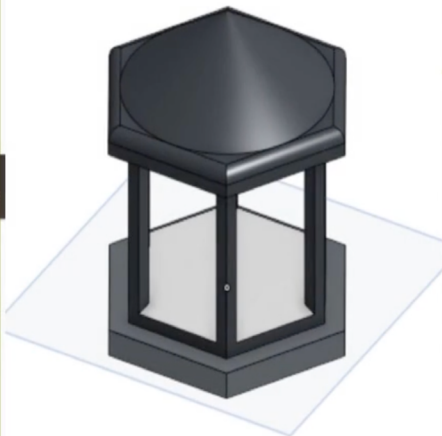
- Hexagonal Base
- 120 degrees interior angles
- Candle covered by shell
- Made of metal and glass

### Candle Holder 2

- Circular Base
- 360 degrees
- Exposed candle
- Made of metal

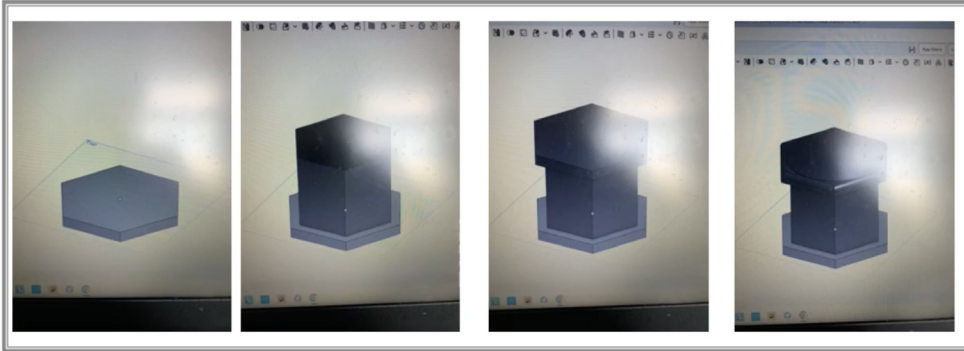


## CAD Model



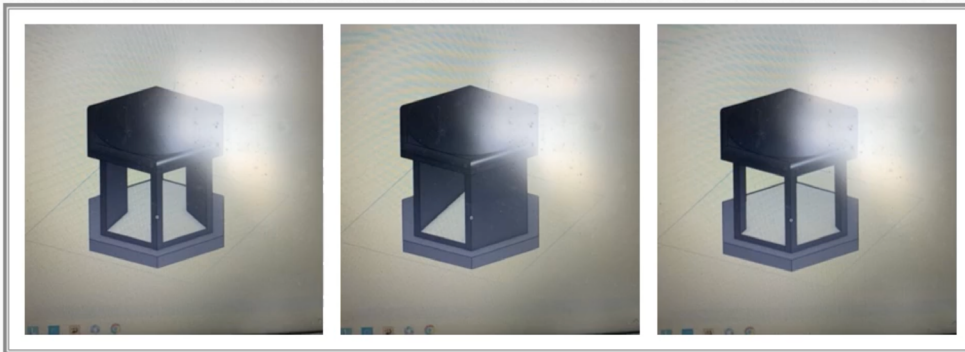
### Keyboard shortcuts

General	Sketch	View
? Keyboard shortcuts	L Line	shift Z Zoom in
ctrl Z Undo	G Corner rectangle	Z Zoom out
ctrl Y Redo	R Center rectangle	F Zoom to fit
space bar Clear selection	C Circle	← → ↑ ↓ Rotate
shift S Save a version	A Arc	shift ← → ↑ ↓ Pan
	shift F Fillet	shift 1 Front view
<b>Part Studio</b>	M Trim	shift 2 Back view
S Sketch	X Extend	shift 3 Left view
shift E Extrude	O Offset	shift 4 Right view
shift F Fillet	U Use	shift 5 Top view
ctrl M Mate connector	D Dimension	shift 6 Bottom view
	I Coincident	shift 7 Isometric view
<b>Assembly</b>	B Parallel	N Normal to
ctrl C Copy	T Tangent	P Hide/show planes
ctrl V Paste	H Horizontal	
M Mate	V Vertical	
ctrl M Mate connector	E Equal	
I Insert dialog		



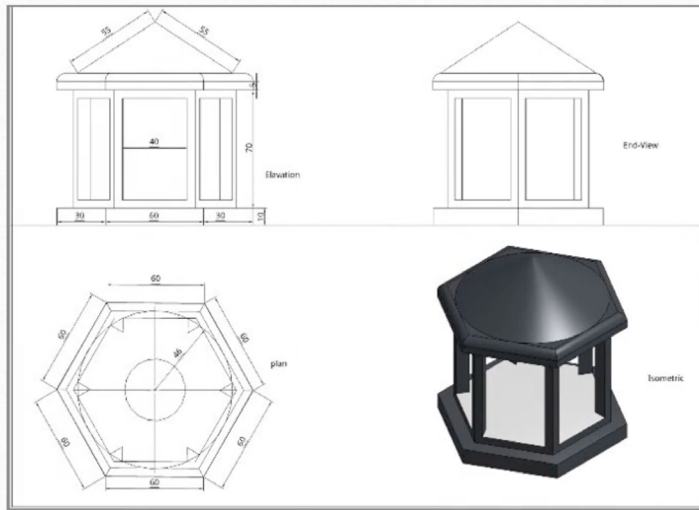
## CAD Model using Rollback

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## CAD Model using Rollback

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## Orthographic Projection using CAD



This presentation with accompanying student voiceover was submitted as a video [which can be viewed here](#)

## Teacher annotations using the Features of Quality

The annotations capture observations by the teacher, using the features of quality, with a view to establishing the level of achievement this work reflects. The annotations and judgments were confirmed by a Quality Assurance group, consisting of practising teachers and representatives of the NCCA, the Inspectorate, the State Examinations Commission and the Oide support service.

### Teacher annotations

#### Research and analysis:

The research method chosen was appropriate for their area of learning and generated a suitable analysis. The student completed both primary and secondary research and used this research as a foundation to explore the geometry of two candle holders.

#### Exploring concepts:

The response demonstrated a reasonable level of understanding of concepts relevant to the domain. The student's use of a voice over was very effective in communicating their understanding of concepts and terminology associated with the geometry of their chosen candle holders. Some of the geometry could have been further interrogated.

#### Graphical presentation:

The findings were well presented, using an appropriate media, with careful consideration of what information best communicated the Classroom-Based Assessment. The student used a PowerPoint Presentation incorporating images of sketches and a voice over. While the quality of the sketching needed further improvement, a CAD model was used effectively to reinforce their understanding of the geometry associated with a candle holder.

Overall judgement:  In line with expectations