

Summative 3: Elements of Good Design

Overall Expectation(s): 1. Analyse personal, social, economic, and environmental factors that need to be considered in designing and building structures and devices (7s20).

Elements of Good Design

- A good design takes into account the function of the structure.
- Good design considers the strength and stability needed by a structure.
- Symmetry is often used in good design.
- Ergonomic design of objects makes them easier to use.

How do you know if your structure has a good design? Ask yourself these questions when designing and building.

- Does my design link the structure to its function?
- Can my design withstand the forces that the structure will encounter?
- Is my design easy to build with the materials I want to use?
- Is my design ergonomic?
- Is my design aesthetically pleasing?
- Do I want my design to be symmetrical?

Choose a structure in the community you live in. Using the Elements of Good Design as a guide, consider the possible factors for each point of view that should have been considered when designing and building the structure to meet specific needs. For example, imagine a new shopping centre was being built in Richmond Hill.

Individuals (child, elderly person, parent, families)

- What questions/factors would an Individual think about regarding the location/materials used for building/ergonomics/and safety of the new shopping centre?

Society (members of a community who live together for their mutual benefit)

- What questions/factors would a member of society think about regarding the location/materials used for building/ergonomics/and safety of the new shopping centre?

Economy (companies that produce items, distributors (businesses) and consumers (shoppers) of goods & services)

- What questions/factors would a member of the economy think about regarding the location/materials used for building/ergonomics/and safety of the new shopping centre?

Environment (environmentalist, ecologist, green people)





- What questions/factors would an environmentalist think about regarding the location/materials used for building/ergonomics/safety of the new shopping centre?

Assessment Criteria - Summative Evaluation

	Level 4	Level 3	Level 2	Level 1
• Evaluate the importance for individuals, society, the economy, and the environment of factors that should be considered in designing and building structures and devices to meet specific needs (7s24)	• Student demonstrates a high degree of understanding when analysing personal, social, economic, and environmental factors that need to be considered in designing and building structures and devices.	• Student demonstrates considerable understanding when analysing personal, social, economic, and environmental factors that need to be considered in designing and building structures and devices.	• Student demonstrates some understanding when analysing personal, social, economic, and environmental factors that need to be considered in designing and building structures and devices.	Student demonstrates limited understanding when analysing personal, social, economic, and environmental factors that need to be considered in designing and building structures and devices.

FULL Name: _____

DUE Date: _____

	Individuals (People & Families) 	Society (Members of a community who live together for their mutual benefit) 	Economy (system of production, distribution and consumption of goods & services of an economy) 	Environment Natural surroundings 
Location				
Materials				
Ergonomics				
Safety				