

Investigation Skills - The Tender Process

Task 2 of the Scenairo tender

- 1 Investigate various possible structures that could solve the problem.
Include the following design aspects:
 - a What problem has to be solved?
 - b Where are you going to start the process?
 - c Where will you build the bridge?
 - d When will you have to start so that you finish in time?
 - e Who will be using the final product?
 - f Analyse existing products relevant to the problem in terms of:
 - **fitness-for-purpose** (including suitability of materials)
 - safety for users
 - cost of materials
 - cost of construction.
 - g Work out realistic costs of:
 - real materials
 - labour
 - transport.

Answers

1a.

b.

c.

d.

e

f

g

2. Draw a plan and the necessary documents that will be required for the tender.

Your tender proposal must include:

- a clear design brief with specifications and constraints
- detailed working drawings
- an **aesthetic**, **ergonomic**, functional and structurally sound scale model
- a poster of the bridge design, done as an isometric drawing with shading and colour
- a detailed evaluation motivating why your bid should win the tender.

