

THE TOWER EXERCISE

STUDENT BRIEF

Working as a team, you are expected to erect a tower, gaining maximum profit by building the tallest structure, with the minimum number of bricks, in the shortest time.

The tower can be of any design, but must be self-standing and stable enough to be measured.

The activity will consist of two phases :

1. The Planning and Design Preparation Phase

2. The Construction Phase

As a team you should elect a Project Manager whose role is to ensure the team remains on schedule and that ALL your team members are involved at EVERY stage.

TEAM ROLES:

1 - **Project Manager:** will lead and co-ordinate the team

2 - **Architect:** Will draw up the final plans on the sheet attached

3 - **Quantity Surveyor:** Will cost the plan and complete the contract document below and tender submission before construction phase.

4 - **Site Manager:** the only person allowed to construct the project on the large site plan.

Contract Document

(to be submitted before the Construction Phase)

Construction Company
Name:

Site Manager:

No. of bricks to be used:

Planned Profit:

Height in cm:

Planned Profit:

Overall Profit expected:

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Reshaping
tomorrow

Wates

SKETCH OF PROPOSED DESIGN

THE TOWER EXERCISE

Reshaping
tomorrow

Wates

PROFIT SCALES

Height

120cm	£35,000 (max profit)
110 cm	£31,500
100 cm	£28,000
90 cm	£24,500
80 cm	£21,000
70 cm	£17,500
60 cm	£14,000
50 cm	£10,500
40 cm	£ 7,000
30 cm	£ 3,500
20 cm	Min. height – no profit

Materials

50 bricks (up to)	£50,000
60 bricks	£45,000
70 bricks	£40,000
80 bricks	£35,000
90 bricks	£30,000
100 bricks	£25,000
110 bricks	£20,000
120 bricks	£15,000
130 bricks	£10,000
140 bricks	£ 5,000
1500 bricks	No profit

Penalties

For every second over the planed time you lose £500

For every cm below the estimated height you lose - £500

For every brick used over the estimated amount you lose - £500