## Dave Diamond

Dave is the owner of Beautiful Bathrooms, which he founded ten years ago. The company provides great bathrooms that suit people's needs and personalities, whatever their budget!

He has four new customers who all want a new bathroom. Dave wants you, his new design team, to come up with the right bathroom for the right customer, and to tell him how much it will cost.

You must remember that this is how much it will cost Dave to buy all the parts from his supplier. He always adds on a percentage for his own profits. Of course, he has to charge for the person-power to do the work. How else would you get paid?


## Rules for designing and planning

- First and foremost, make sure you give the customers what they want!
- All rooms are 3 m high.
- All sinks are 40 cm wide, 50 cm deep and 75 cm high.
- All bathtubs are 200 cm long, 70 cm wide and 50 cm high.
- All showers have a $\mathrm{Im}^{2}$ base and are 2.5 m high.
- All toilets are 55 cm deep, 35 cm wide and 75 cm high.
- Showers must go in a corner, and must have tiles behind them.
- Toilets must go against a wall and have $\mathrm{Im}^{2}$ of free floor area around them.
- You must not put flooring under a shower.
- Toilets and baths do not have to have tiles behind them otherwise you can put tiles anywhere you want.

- Tiles do not have to go higher than 40 cm above the top of a sink, bath or shower.
- Ceilings should only be painted.
- All doors are 1 m wide and 2 m high, and must be painted.
- Don't worry about windows or lights. They will be sorted out separately.


## Presenting your work

- Draw a plan of your proposed bathroom layout: a separate plan for each wall and the floor.
- Show all calculations neatly in separate areas.
- You must show an overall cost for all the equipment and materials.


## Calculating profits and labour costs

- If you move on to preparing the actual customer estimates, Dave simply adds $10 \%$ on to all costs. To calculate costs of workers to fit the bathroom, use the information about personpower. Remember that profit for Dave does not include his staff's wages.

