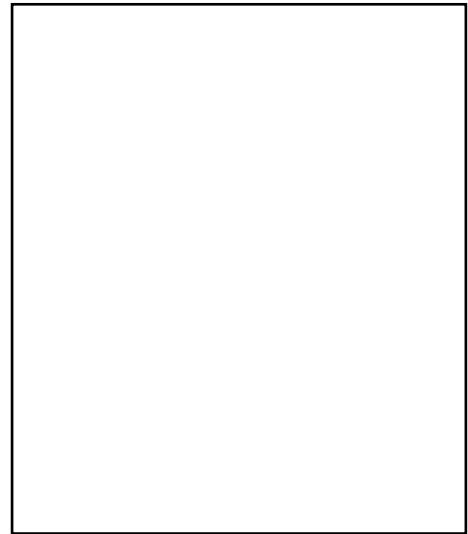


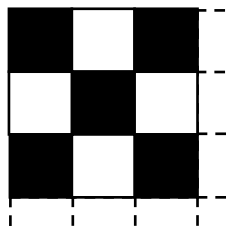
The Taylor family have a new kitchen.
 They want to put black tiles and white tiles on the floor.
 Each tile measures 50 cm by 50 cm.
 Here is a plan view of the area they need to tile.



Scale 1 centimetre represents 50 centimetres

Mr Taylor says

'I think we should alternate the black tiles and white tiles like this.'



- (a) How many black tiles and how many white tiles does this pattern use for the whole kitchen floor?
- (b) Here are the costs of black tiles and white tiles.
 You cannot split packs.

	Black	White
Pack of five	£17.80	£17.80

Work out the cost of the tiles for the kitchen floor using Mr Taylor's pattern.

Extension

- 1 Mrs Taylor says
 'We should have one row of black tiles around the edge of the kitchen.
 The rest should be white.
 I think our patterns will cost the same.'

Is Mrs Taylor correct?
 Show how you decide.

- 2 Make up a pattern of your own.
 Work out the cost of your pattern.
 Compare your pattern and cost with somebody else's.