Name:

Presenting evidence

Going solo (1)

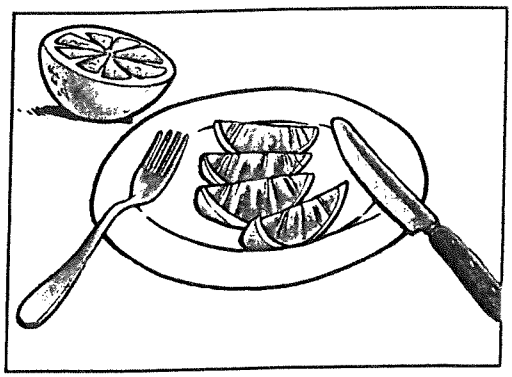
She was eating an orange at the time and I noticed suddenly that she was not eating it in the normal way. In the first place she had speared it from the fruit bowl with her fork instead of taking it in her fingers. And now, with knife and fork, she was making a series of neat incisions in the skin all around the orange. Then, very delicately, using the points of her knife and fork, she peeled the skin away in eight separate pieces, leaving the bare fruit beautifully exposed. Still using a knife and fork, she separated the juicy segments and began to eat them slowly, one by one, with her fork.

'Do you always eat an orange like that?' I said.

'Of course.'

'May I ask why?'

'I never touch anything I eat with my fingers,' she said.



'Good Lord, don't you really?'

'Never. I haven't since I was twenty-two.'

'Is there a reason for that?' I asked her.

'Of course there's a reason. Fingers are filthy.'

'But you wash your hands.'

'I don't *sterilize* them,' Miss Trefusis said. 'Nor do you. They're full of bugs. Disgusting dirty things, fingers. Just think what you do with them!'

I sat there going through the things I did with my fingers.

'It doesn't bear thinking about, does it?' Miss Trefusis said. 'Fingers are just implements. They are gardening implements of the body, the shovels and the forks. You push them into everything.'

'We seem to survive,' I said.

'Not for long you won't,' she said darkly.

I watched her eating her orange, spearing the little boats one after the other with her fork. I could have told her that the fork wasn't sterilized either, but I kept quiet.

'Toes are even worse,' she said suddenly.

'I beg your pardon?'

'They're the worst of all,' she said.

'What's wrong with toes?'

'They are the nastiest part of the human body!' she announced vehemently.

'Worse than fingers?'

'There's no comparison,' she snapped. 'Fingers are foul and filthy, but *toes*! *Toes* are reptilian and viperish! I don't wish to talk about them!'

I was getting a bit confused. 'But one doesn't eat with one's toes,' I said.

'I never said you did,' Miss Trefusis said.

Going solo (2)

1. Did Miss Trefusis have unusual table manners? Explain how you know that.

2. Was she fearful in anyway? What clues tell you this?

3. Explain why Miss Trefusis may have been wrong to assume forks were safer than fingers to put in her mouth.

4. Your question:

   Your answer: How do you know that?

5. Your question:

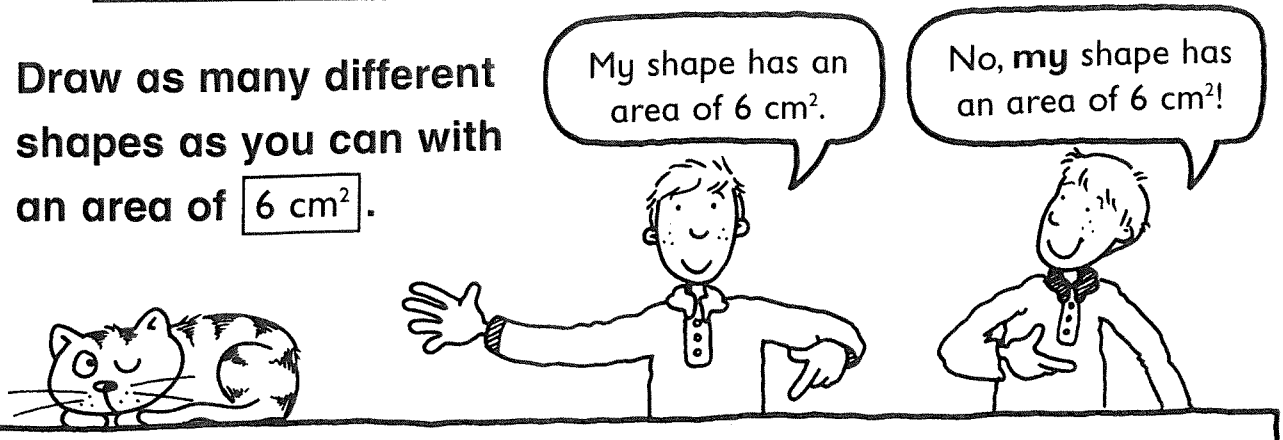
   Your answer: How do you know that?

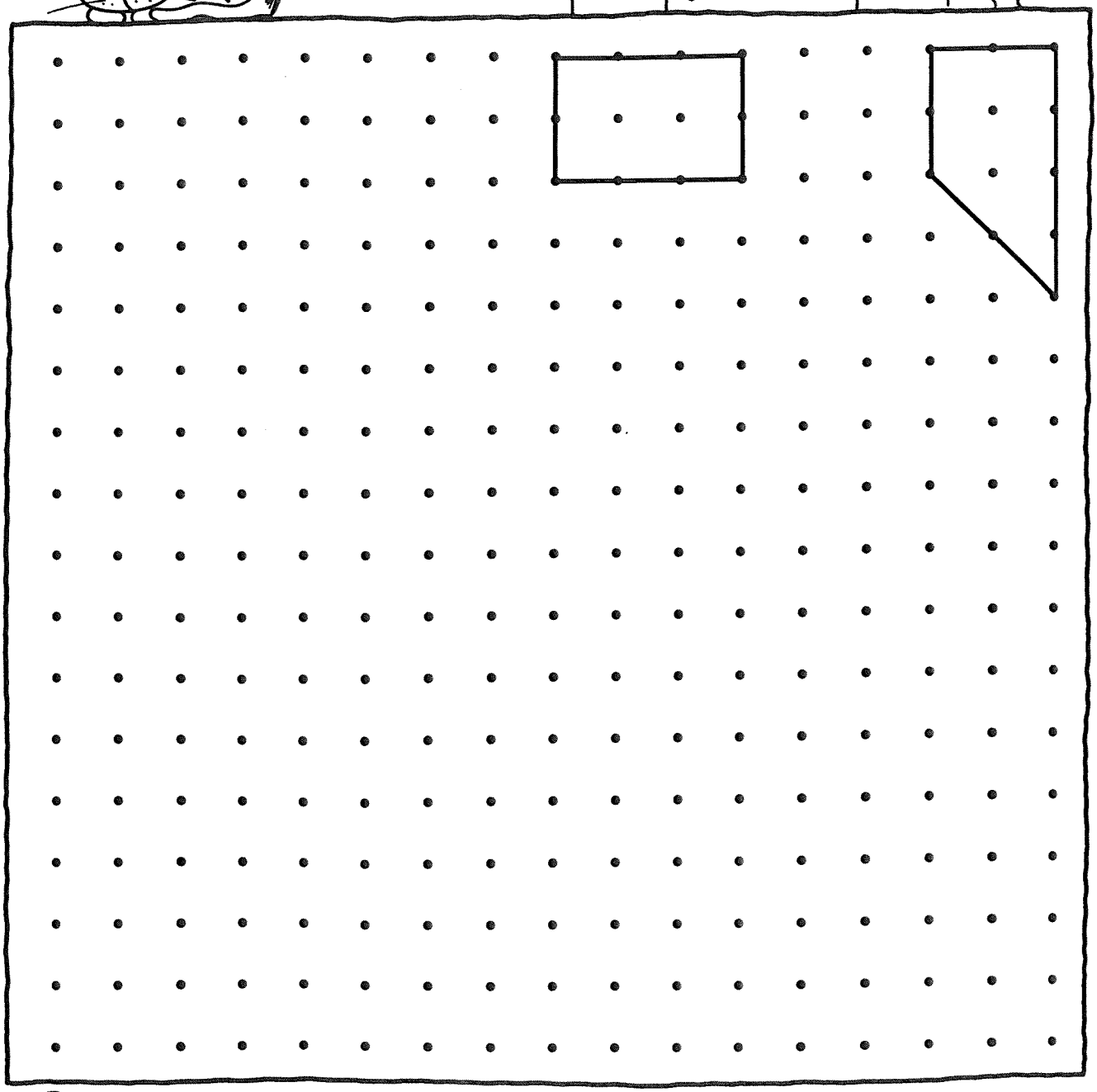
6. Your question:

   Your answer: How do you know that?

Same area, different shape

- **Draw as many different shapes as you can with an area of $6\ cm^2$.**





- **Write the name of each shape you have drawn.**

Teachers' note One strategy for this exercise is to start with any given shape whose area is 6 cm², then imagine taking a piece off and sticking it somewhere else on the shape.

Developing Numeracy
Measures, Shape and Space
Year 6

Name _____

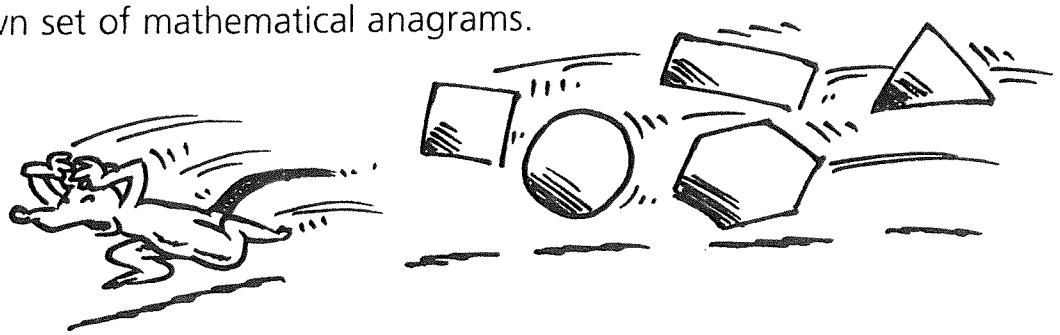
S7 S9

Shape anagrams

Rearrange the letters to make the name of a shape.

1 quaser	_____	**2** buce	_____
3 tracengle	_____	**4** oxhagen	_____
5 drincley	_____	**6** shurbom	_____
7 repesh	_____	**8** lapmelgrolara	_____
9 glantier	_____	**10** once	_____
11 buodic	_____	**12** tagponen	_____
13 contago	_____	**14** smirp	_____
15 lericc	_____	**16** draimpy	_____

Invent your own set of mathematical anagrams.



Percentage problems

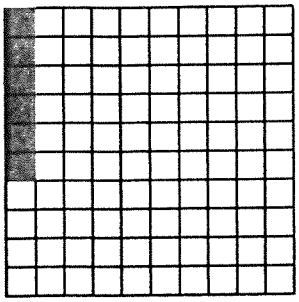
solve

Getting ready

We have been using 100 grids to represent percentage, with each square representing 1%.

What to do

These grids are set up a little differently. Work with a partner to figure out what each square represents and then answer the questions.



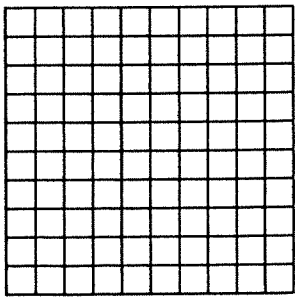
Problem 1

These 6 squares have a value of 36.

a What is the value of 1 square? _____

b What is the value of the entire grid? _____

c If 50% of the grid is shaded, what value is shaded? _____



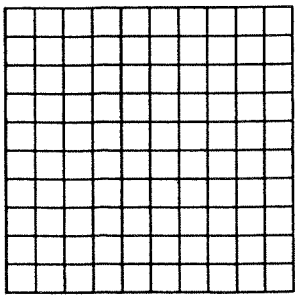
Problem 2

There are 140 convenience stores in Smallville.

a 40% of these stock your favourite Slurpee flavour. Use the grid to represent this information.

b How many stores sell your favourite flavour? _____

300 people



Problem 3

a If this grid represents 300 people, what does each square represent? _____

b How many people are represented by ten squares? _____

c 60 of the 300 people like watching sports. Represent this on the grid in red.

d 225 people prefer playing sport to watching it. Represent this in green.

Name _____

N33 N34

Making division easier

Some divisions can be made easier by first dividing both numbers by 10 or 100.

$40 \div 30 = 4 \div 3$ (dividing both by 10)

or

$840 \div 700 = 8{\cdot}4 \div 7$ (dividing both by 100)

Try these:

1 $74 \div 20$ 2 $315 \div 50$ 3 $91 \div 70$

4 $720 \div 300$ 5 $126 \div 60$ 6 $760 \div 200$

7 $240 \div 400$ 8 $640 \div 40$ 9 $8500 \div 500$

Some divisions can be made easier by first multiplying both numbers by 10 or 100.

$0{\cdot}45 \div 0{\cdot}9 = 4{\cdot}5 \div 9$ (multiplying both by 10)

or

$1{\cdot}28 \div 0{\cdot}08 = 128 \div 8$ (multiplying both by 100)

Try these:

10 $1{\cdot}2 \div 0{\cdot}3$ 11 $11{\cdot}5 \div 0{\cdot}5$ 12 $23{\cdot}4 \div 0{\cdot}9$

13 $1{\cdot}32 \div 0{\cdot}02$ 14 $0{\cdot}84 \div 0{\cdot}7$ 15 $2{\cdot}16 \div 0{\cdot}06$

16 $0{\cdot}81 \div 0{\cdot}09$ 17 $0{\cdot}96 \div 0{\cdot}4$ 18 $0{\cdot}96 \div 0{\cdot}08$