

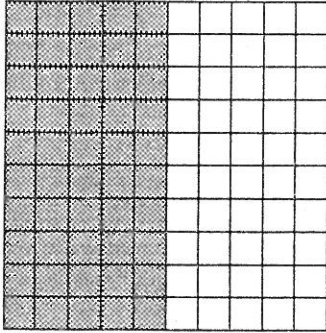
SMILE WORKCARDS

Percentages Pack One

Contents

	Title	Card Number
1	Out of 100 w/s	2133
2	Percentage Estimation w/s	2199
3	Percentages of Money w/s	2143
4	50% is Half Marks	1572
5	25% of What?	2236
6	Wage Bargaining	792
7	Percentages w/s	1095

Out of 100



50 squares
are shaded
out of
100 squares.



This is

$$\frac{50}{100}$$

or

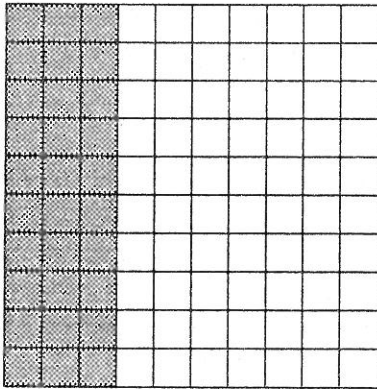
$$50\%$$

or

50 per cent.

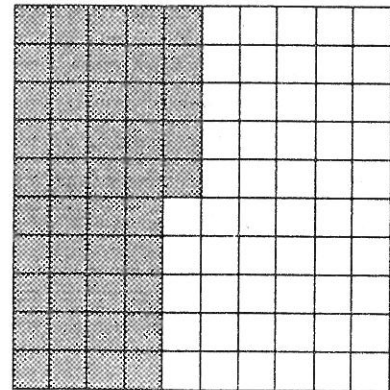
Complete these.

1.



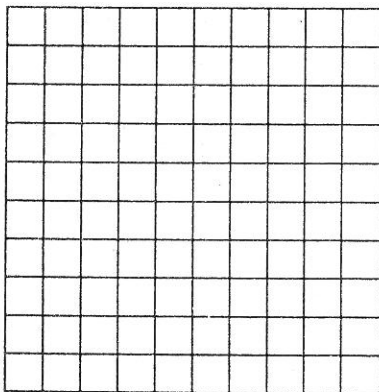
$$\frac{\quad}{100} = \quad \%$$

2.



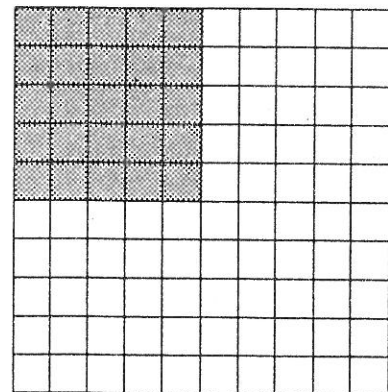
$$\frac{\quad}{100} = \quad \%$$

3.



$$\frac{\quad}{100} = 40\%$$

4.

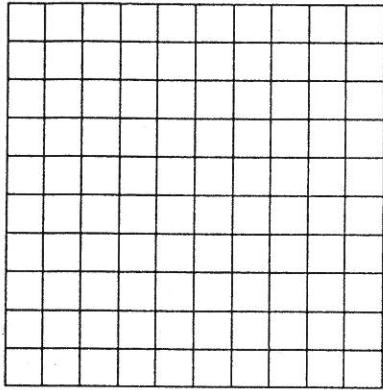


$$\frac{\quad}{100} = \quad \%$$



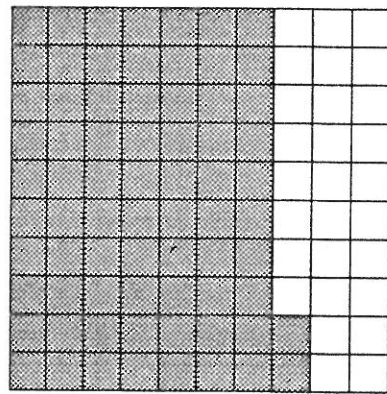
Now complete these.

5.



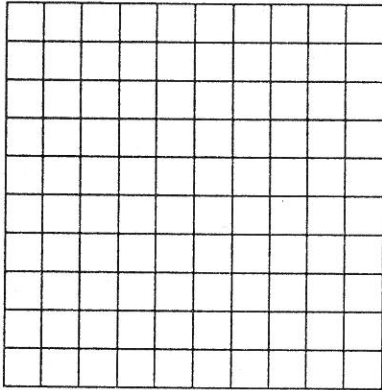
$$\frac{32}{100} = \square \%$$

6.



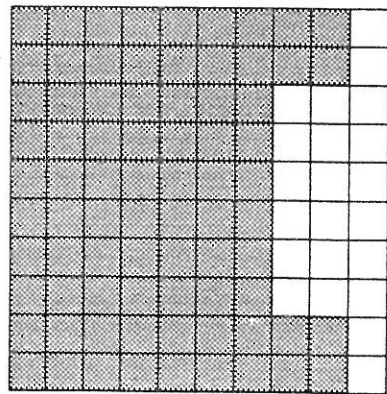
$$\square = \square \%$$

7.



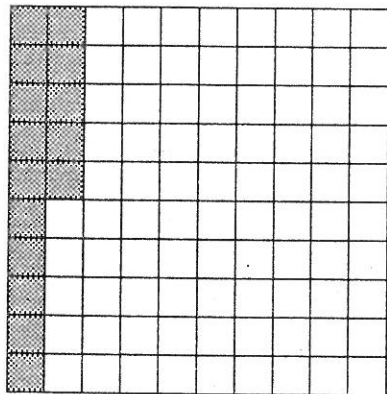
$$\square = 65\%$$

8.



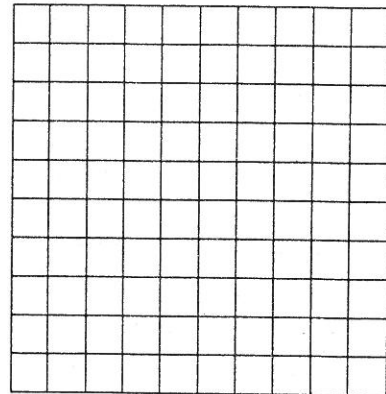
$$\square = \square \%$$

9.



$$\square = \square \%$$

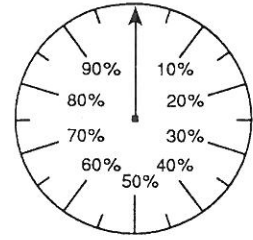
10.



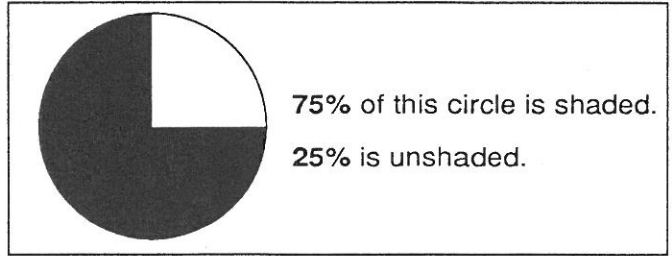
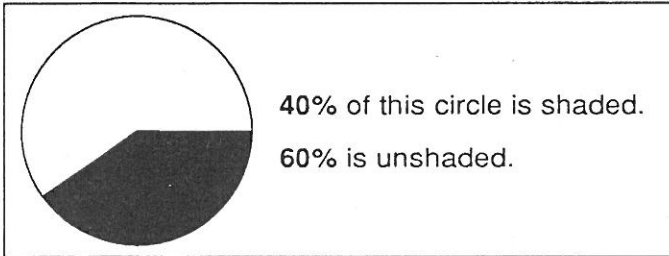
$$\square = 100\%$$

Percentage Estimation

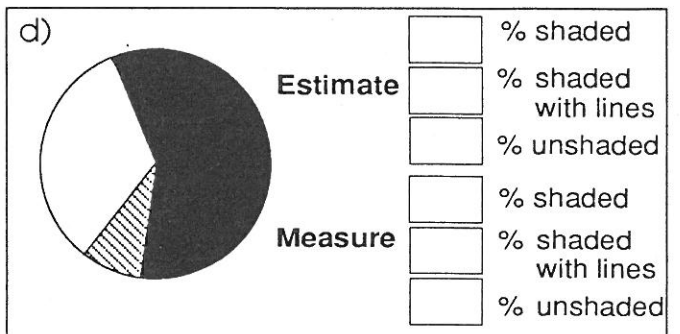
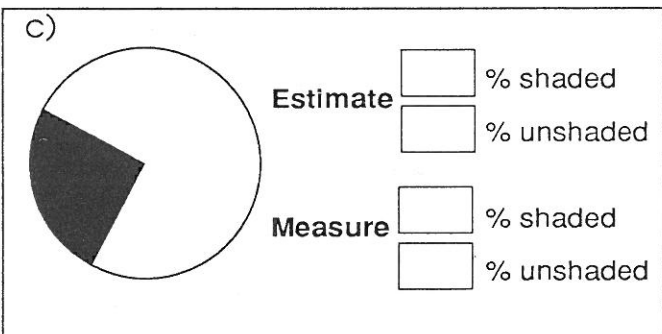
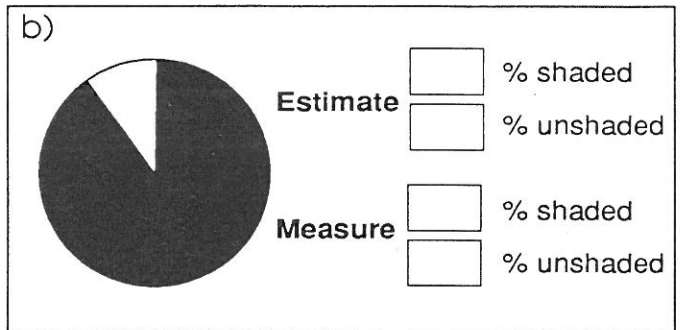
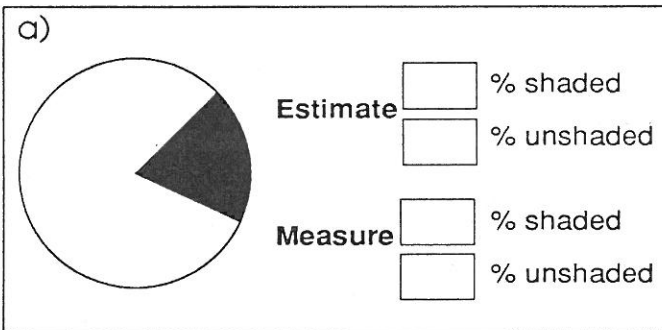
You will need a **percentage measurer** (or trace and use this one).



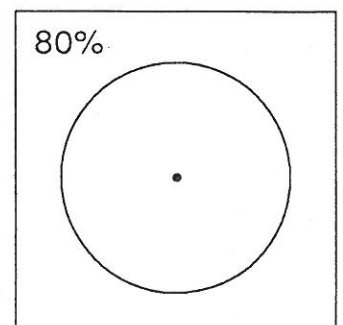
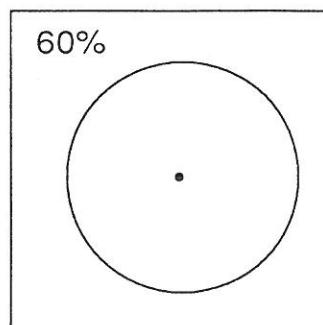
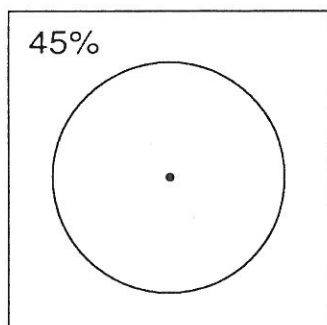
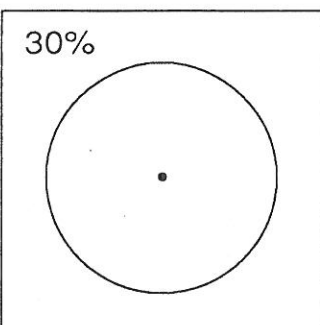
Use your percentage measurer to check these statements.



1. Estimate then measure the following percentages.

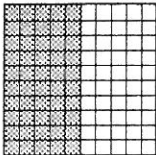
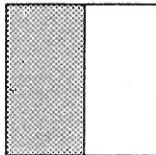


2. Use a ruler and pencil to shade in these percentages.







Percentages of Money

A percentage is a fraction with a denominator of a hundred.

50% means $\frac{50}{100}$  which is the same as $\frac{1}{2}$ 


Complete this table.

Original amount				
	50%	25%	75%	100%
60p	30p	15p	45p	60p
80p	40p			
£16				
84p		21p		
£1				
£128				
£5		£1.25		
£1.80				£1.80
£6.20				
	20p			
		£1.40		

Calculate these percentages.

25% of £2.40 is _____	75% of 96p is _____
50% of £3.80 is _____	25% of £26 is _____
75% of £5.40 is _____	100% of £7.57 is _____



Use the  button on your calculator to check your answers.

“50% is half marks”

This envelope should contain 21 red cards and 21 blue cards.

Match the cards in pairs.

10% IS A
TENTH OF THE
MARKS

I GOT $\frac{3}{4}$
RIGHT - 75%

1% IS A
PENNY IN THE
POUND

50% of £10

1% of £7

10% of £1

50% of £16

10% of £2

25% of £100

100% of £15

100% of £6

10% of £4

50% of £4

50% of £20

1% of £1

10% of £6

25% of £1

100% of £4

25% of £4

1% of £3

75% of £1

75% of £4

25% of £2

75% of £2

£8.00

3p

20p

7p

25p

£3.00

£15.00

1p

£4.00

£5.00

£1.00

£10.00

40p

£25.00

50p

£6.00

10p

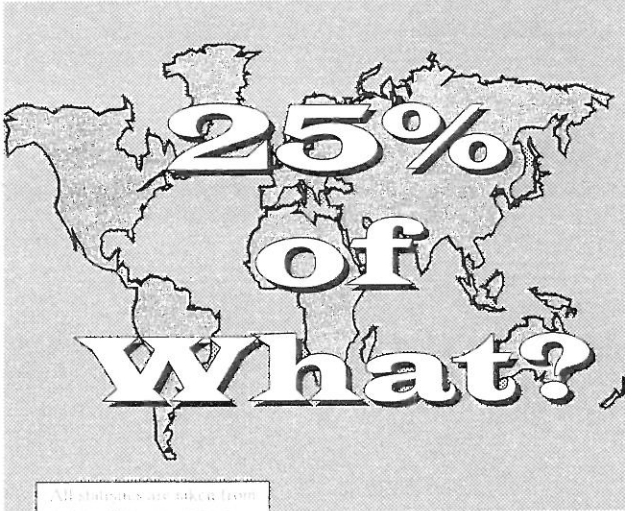
£2.00

£1.50

60p

75p

Smile 2236



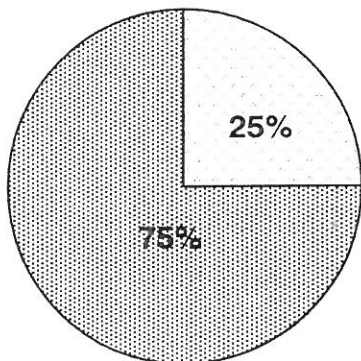
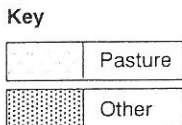
Any country's land use can be split into 4 categories.

- Arable – growing food e.g. rice
- Pasture – grass to feed animals
- Forest – trees
- Other – desert, towns, mountains etc.

Norfolk Island is a small island off the east coast of Australia.



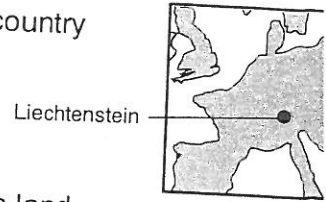
This pie chart shows land use in Norfolk Island.



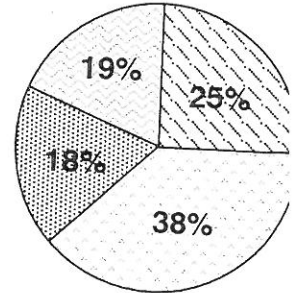
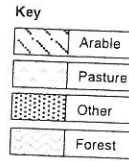
25% of the land is used for pasture.

Norfolk Island has a total area of 40km².

Liechtenstein is a country in central Europe.



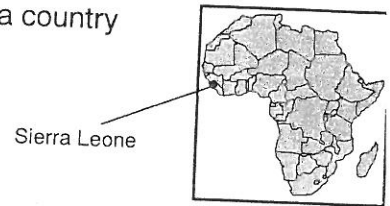
This pie chart shows land use in Liechtenstein.



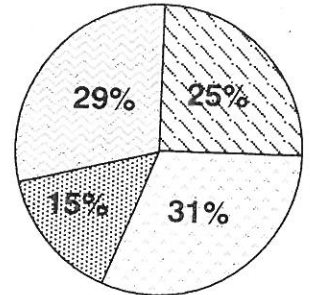
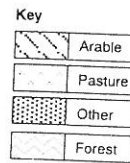
Liechtenstein has a total area of 160km²

What area of land is arable ?

2 Sierra Leone is a country in West Africa.



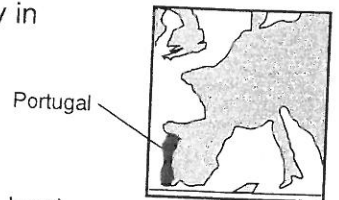
This pie chart shows land use in Sierra Leone.



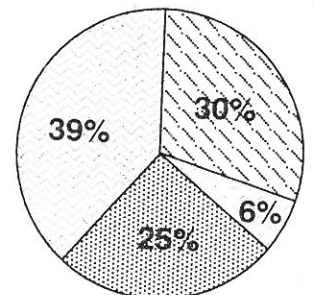
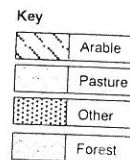
Sierra Leone has a total area of 71 740km².

What area of land is arable ?

3 Portugal is a country in southern Europe.



This pie chart shows land use in Portugal.







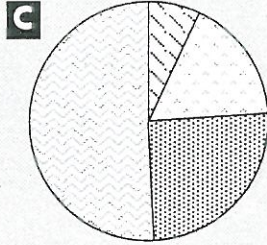
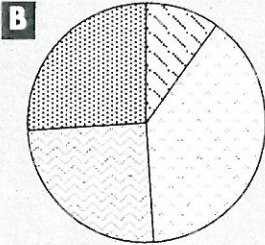
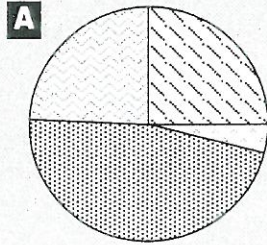
It has a total area of 92 390km².

What area of land is 'other'?

4 Match each pie chart with its country and statement.

Pie chart

Key	
	Arable
	Pasture
	Other
	Forest



Country

Switzerland

The total area of land is 41 290km².

Arable	10%
Pasture	39%
Other	26%
Forest	25%

Panama

The total area of land is 77 080km².

Arable	7%
Pasture	17%
Other	25%
Forest	51%

Togo

The total area of land is 56 790km².

Arable	25%
Pasture	4%
Other	47%
Forest	24%

Statement

1 14 197.5km² of the land is used for arable.

2 10 322,5km² of the land is used for forest.

3 19 270km² of the land is used for other.

5 Explain why the following statement is not true.

"25% of Togo's and Sierra Leone's land is arable. This means that they can grow the same amount of food."

0792

SMILE

WAGE BARGAINING



I AM THE MANAGING
DIRECTOR OF A SMALL FIRM.
I HAVE SIX EMPLOYEES.
I EARN £6,000 A YEAR.



I AM THE FOREMAN.
I EARN £4,000 A YEAR.



WE ARE THE SKILLED
WORKERS AND WE EACH
EARN £3,000 A
YEAR

WE ARE THE
UNSKILLED WORKERS.
WE GET £2,000 EACH.



1. AT THE UNION MEETING ON THE SHOP FLOOR:



THE COST OF LIVING IS TOO HIGH.

WE MUST ASK FOR MORE MONEY

2. NEXT DAY IN THE MANAGING DIRECTOR'S OFFICE :



I'M AFRAID THERE IS ONLY £2,100 TO SPARE THIS YEAR. WE WILL HAVE TO SHARE THIS BETWEEN US.

3. BACK ON THE SHOP FLOOR :



AS FOREMAN, I SUGGEST THAT WE ALL HAVE A 10% INCREASE IN OUR SALARIES.

WHAT DO YOU SAY CADS ?

***** !!!

THE MONEY SHOULD BE SHARED OUT EQUALLY BETWEEN US WORKERS — NOT THE MANAGEMENT

I DON'T AGREE

YES! YES! BUT A FLAT-RATE INCREASE

LET'S TAKE A VOTE ON IT

WHAT DO YOU THINK ?

1. WORK OUT HOW MUCH EACH PERSON WOULD GET IF THEIR SALARIES WERE INCREASED BY 10%.
2. WORK OUT HOW MUCH EACH PERSON WOULD GET BY SHARING THE £ 2100 EQUALLY BETWEEN THEM ALL.
3. WHICH WAY WOULD YOU VOTE IF YOU WERE (a) THE MANAGING DIRECTOR ?
(b) A SKILLED WORKER ?
WHY ?
4. WHICH METHOD DO YOU THINK MOST PEOPLE VOTED FOR ?

Percentages

The Latin word 'centum' means a hundred.

Some words which include 'cent' have a connection with a hundred.

Which of these words have a connection with a hundred?

- centigrade centre recently cent
- centimetre bicentenary century centipede

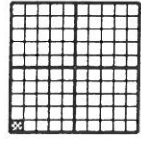
If you are not sure look them up in a dictionary.

Can you find any others?

Latin word 'per' means 'each'.

Per cent means per hundred or each hundred.

The symbol for per cent is %.



$$\frac{1}{100}$$

$$1 \div 100$$

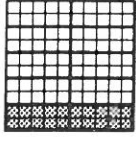
$$0.01$$

Shading

Fraction

Divide

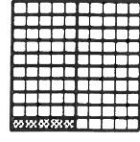
Decimal



$$\frac{5}{100}$$

$$5 \div 100$$

$$0.05$$



$$\frac{20}{100}$$

$$20 \div 100$$

$$0.2$$

1 out of each 100 = $\frac{1}{100}$ = 1 %

20 out of each 100 = $\frac{20}{100}$ = %

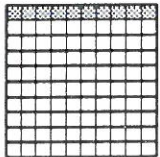
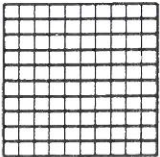
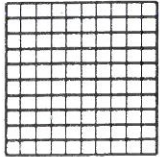

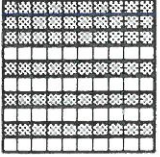
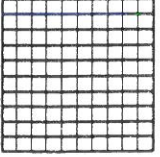
5 out of each 100 = $\frac{5}{100}$ = %

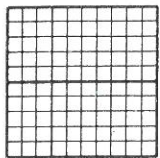
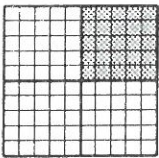
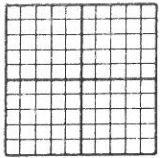
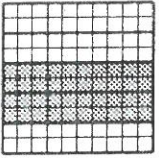
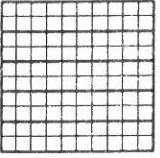
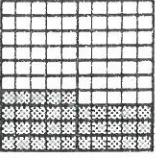
Complete **A**

1. $\frac{9}{100}$ = %
2. $\frac{13}{100}$ = %
3. $\frac{19}{100}$ = %
4. $\frac{53}{100}$ = %
5. $\frac{61}{100}$ = %
6. $\frac{1}{2}$ = $\frac{\quad}{100}$ = %
7. $\frac{1}{4}$ = $\frac{\quad}{100}$ = %
8. $\frac{100}{100}$ = %

B

Complete these tables.

	Shading	Fraction	Decimal	%
1)		$\frac{1}{10}$	0.1	10%
2)		$\frac{30}{100}$	0.	%
3)		$\frac{7}{10}$	0.	%
4)		$\frac{90}{100}$	0.	90%
5)		$\frac{1}{10}$	0.	%
6)		$\frac{80}{100}$	0.8	%

	Shading	Fraction	Decimal	%
7)		$\frac{1}{2}$	0.	%
8)		$\frac{1}{5}$	0.	%
9)		$\frac{3}{4}$	0.	%
10)		$\frac{2}{5}$	0.	%
11)		$\frac{3}{5}$	0.6	%
12)		$\frac{1}{20}$	0.	%