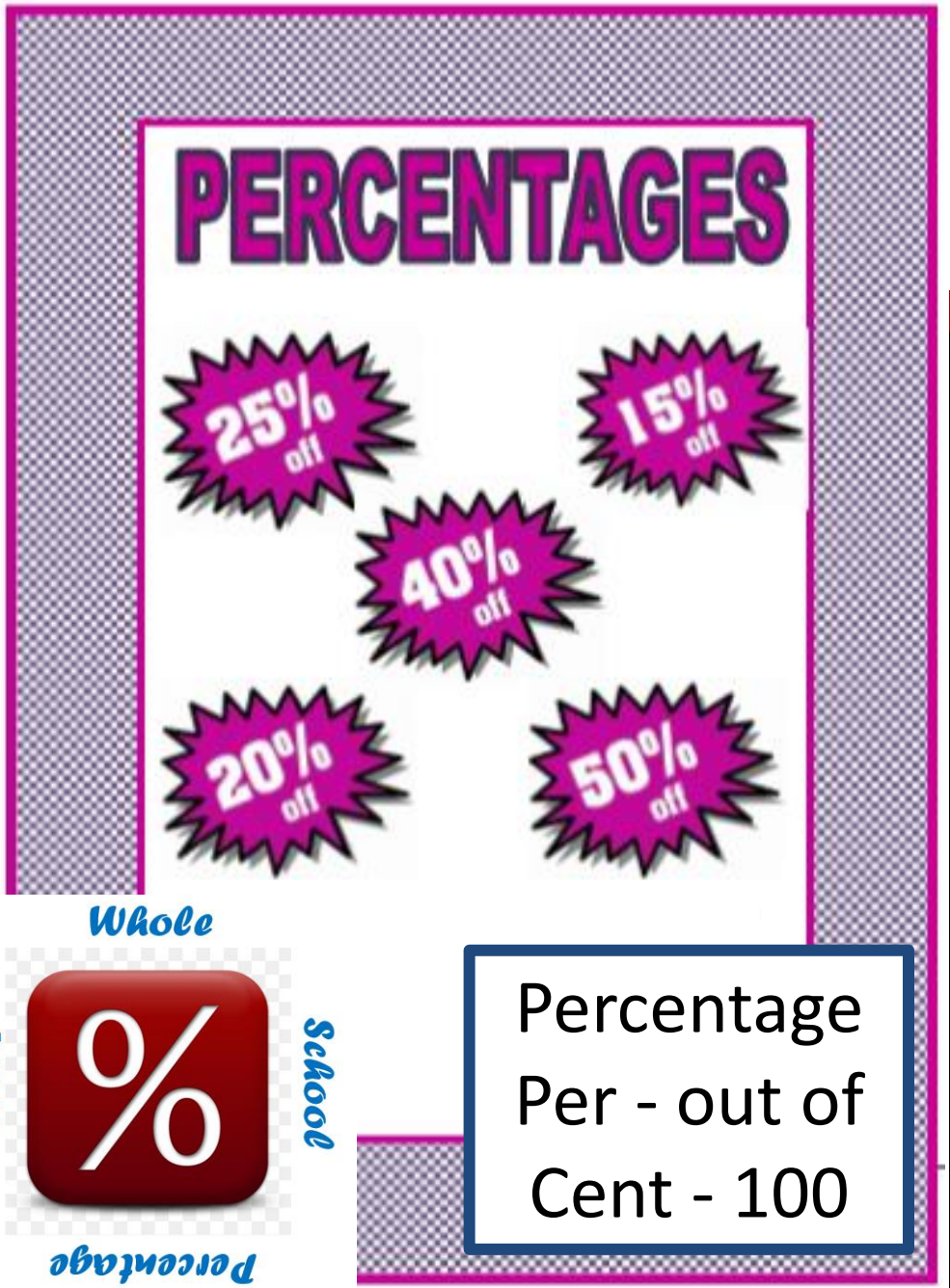
Percentage week Form time

Monday

Percentages week

Introduction to percentages

Percentage Week



Percentage
Per - out of
Cent - 100

Percentages of a whole will add up to 100%

25% of farmers keep horses.

68% of people in the UK have a pet

50% of babies born are boys

12% of cars on the road are red.

84% of women diet before their wedding day

1. What percentage of cars on the road are red? _____
2. What percentage of cars is not red? _____
3. What percentage of ladies want to be slim for their wedding? _____
4. What percentage of baby girls are born every year? _____
5. What percentage of farmers do NOT keep horses on their farm? _____
6. What percentage of people in the UK keep pets? _____
7. What percentage of ladies don't bother to diet before their wedding? _____
8. What percentage of farmers keep horses? _____
9. What percentage of babies born every year are boys? _____
10. What percentage of people in UK do not keep pets?

Percentages of a whole will add up to 100%

25% of farmers keep horses.

68% of people in the UK have a pet

50% of babies born are boys

12% of cars on the road are red.

84% of women diet before their wedding day

1. What percentage of cars on the road are red? 12%
2. What percentage of cars is not red? 88%
3. What percentage of ladies want to be slim for their wedding? 84%
4. What percentage of baby girls are born every year? 50%
5. What percentage of farmers do NOT keep horses on their farm? 75%
6. What percentage of people in the UK keep pets? 68%
7. What percentage of ladies don't bother to diet before their wedding? 16%
8. What percentage of farmers keep horses? 25%
9. What percentage of babies born every year are boys? 50%
10. What percentage of people in UK do not keep pets? 32%

Tuesday

Whole school percentages week

Converting to a percentage

Change these fractions into percentages. The first one has been done for you.

Fractions can be converted into percentages.

$\frac{21}{100}$	21 %	$\frac{35}{100}$	
$\frac{29}{100}$ →		$\frac{44}{100}$ →	
$\frac{77}{100}$		$\frac{85}{100}$	
$\frac{45}{100}$		$\frac{89}{100}$	
$\frac{14}{100}$		$\frac{39}{100}$	
$\frac{25}{100}$		$\frac{58}{100}$	
$\frac{44}{100}$		$\frac{96}{100}$	

When the denominator of a fraction is 100, then the numerator is the %.

Fractions can be converted into percentages.

Change these fractions into percentages. The first one has been done for you.

$\frac{21}{100}$	21 %	$\frac{35}{100}$	35%
$\frac{29}{100}$ →	29%	$\frac{44}{100}$ →	44%
$\frac{77}{100}$	77%	$\frac{85}{100}$	85%
$\frac{45}{100}$	45%	$\frac{89}{100}$	89%
$\frac{14}{100}$	14%	$\frac{39}{100}$	39%
$\frac{25}{100}$	25%	$\frac{58}{100}$	58%
$\frac{44}{100}$	44%	$\frac{96}{100}$	96%

When the denominator of a fraction is 100, then the numerator is the %.

50 is half of 100.
So if a test is out of 50 then
I must double my mark to
get a percentage.

Fractions can be converted into percentages.

All of the marks that I got for my test were out of 50. Change them into percentages by doubling the mark I got. I have done the first one for you.

because 25 x 2 is 50 OR
double 25 is 50

If possible change the denominator to 100 by multiplying …. Remember to multiply the numerator by the same thing. The numerator is then the %.

Test Mark	Percentage	Test Mark	Percentage	Test Mark	Percentage
$\frac{25}{50}$	50%	$\frac{10}{50}$		$\frac{44}{50}$	
$\frac{15}{50}$		$\frac{45}{50}$		$\frac{28}{50}$	
$\frac{30}{50}$		$\frac{35}{50}$		$\frac{11}{50}$	
$\frac{40}{50}$		$\frac{20}{50}$		$\frac{22}{50}$	

50 is half of 100.
So if a test is out of 50 then
I must double my mark to
get a percentage.

Fractions can be converted into percentages.

All of the marks that I got for my test were out of 50. Change them into percentages by doubling the mark I got. I have done the first one for you.

because 25 x 2 is 50 OR
double 25 is 50

If possible change the denominator to 100 by multiplying …. Remember to multiply the numerator by the same thing. The numerator is then the %.

Test Mark	Percentage	Test Mark	Percentage	Test Mark	Percentage
$\frac{25}{50}$	50%	$\frac{10}{50}$	20%	$\frac{44}{50}$	88%
$\frac{15}{50}$	30%	$\frac{45}{50}$	90%	$\frac{28}{50}$	56%
$\frac{30}{50}$	60%	$\frac{35}{50}$	70%	$\frac{11}{50}$	22%
$\frac{40}{50}$	80%	$\frac{20}{50}$	40%	$\frac{22}{50}$	44%

Wednesday

Whole school percentages week

Finding 10% of a number

Finding 10% of something … just divide by 10

BUT not all numbers end in 0.
That is when we use a decimal!
Look at the examples. . . . . .

456 = 45.6 We can't just drop off the 6 so we put a decimal point in front of it. We move 1 place to the LEFT when we divide by 10. That's what we are doing when we find 10% of a number.

3768 = 376.8 5689 = 568.9

10% of 50

50 ÷ 10 = 5

So 5 is 10% of 50

10% of 796

796 ÷ 10 = 79.6

So 79.6 is 10% of 796

Number	10% of the number		Number	10% of the number
369	36.9		632	
512			198	
467			215	
4478			32134	
9965			45769	
57698			66878	
34657			24712	
32659			35476	

Finding 10% of something … just divide by 10

BUT not all numbers end in 0.
That is when we use a decimal!
Look at the examples. . . . . .

456 = 45.6 We can't just drop off the 6 so we put a decimal point in front of it. We move 1 place to the LEFT when we divide by 10. That's what we are doing when we find 10% of a number.

3768 = 376.8 5689 = 568.9

10% of 50

50 ÷ 10 = 5

So 5 is 10% of 50

10% of 796

796 ÷ 10 = 79.6

So 79.6 is 10% of 796

Number	10% of the number	Number	10% of the number
369	36.9	632	63.2
512	51.2	198	19.8
467	46.7	215	21.5
4478	447.8	32134	3213.4
9965	996.5	45769	4576.9
57698	5769.8	66878	6687.8
34657	3465.7	24712	2471.2
32659	3265.9	35476	3547.6

Money !

Money !

So now we find 10% of money. Follow the example

£230 = £23 (Just drop the zero.)

£ 456 = £ 45.6 (But we have 2 digits after the decimal point in money SO just add a zero. = £45.60

Remember **money** always has 2 decimal places

Amount of money	10% of the money	Amount of money	10% of the money
£360	£36	£678	£67.80
£470		£753	
£210		£218	
£870		£8762	
£860		£6643	
£954		£5421	
£461		£8789	

Money !
Money !

So now we find 10% of money. Follow the example

£230 = £23 (Just drop the zero.)

£ 456 = £ 45.6 (But we have 2 digits after the decimal point in money SO just add a zero. = £45.60

Remember **money** always has 2 decimal places

Amount of money	10% of the money	Amount of money	10% of the money
£360	£36	£678	£67.80
£470	£47	£753	£75.30
£210	£21	£218	£21.80
£870	£87	£8762	£87.62
£860	£86	£6643	£66.43
£954	£95.40	£5421	£54.21
£461	£46.10	£8789	£87.89

Thursday

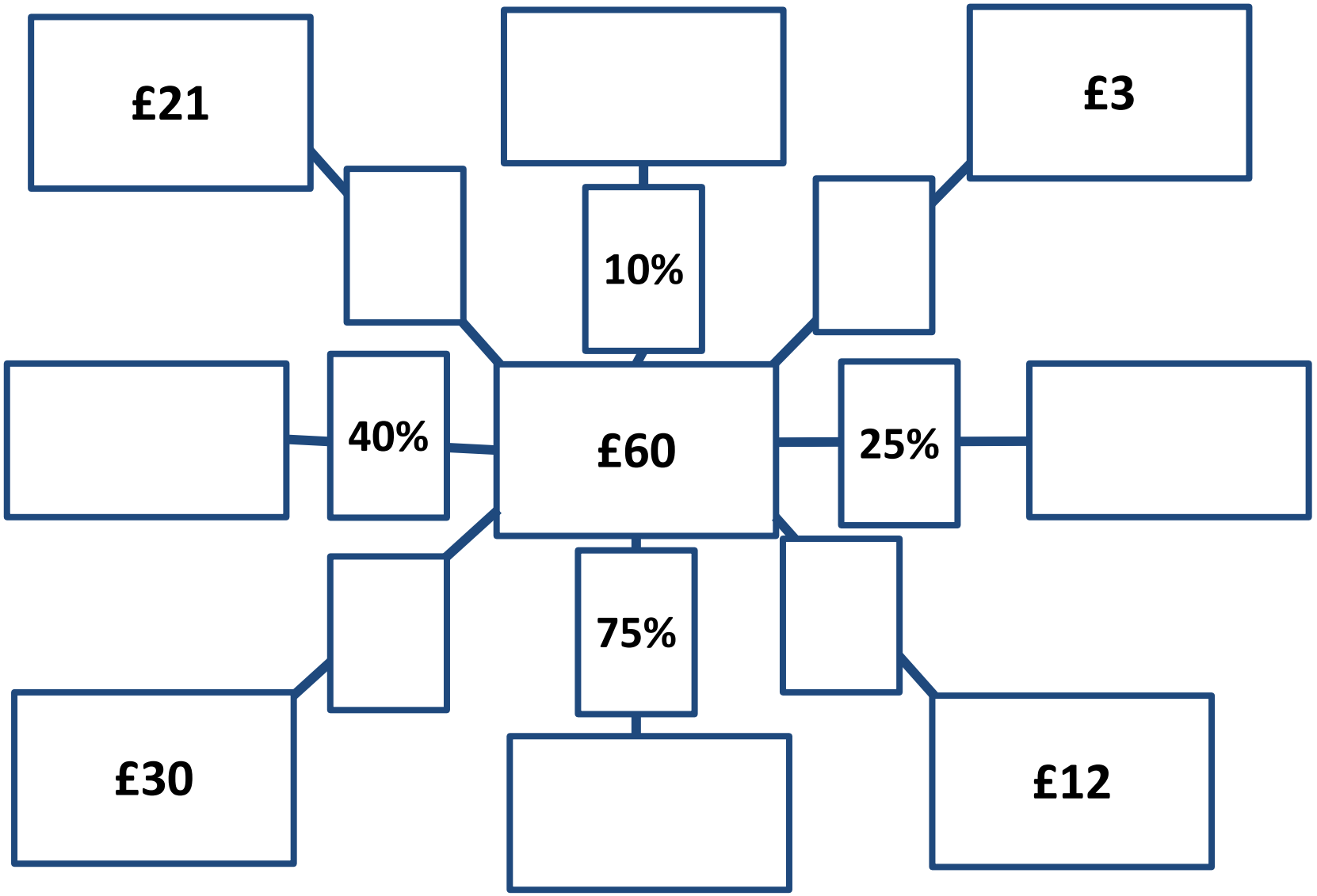
Whole school percentages week

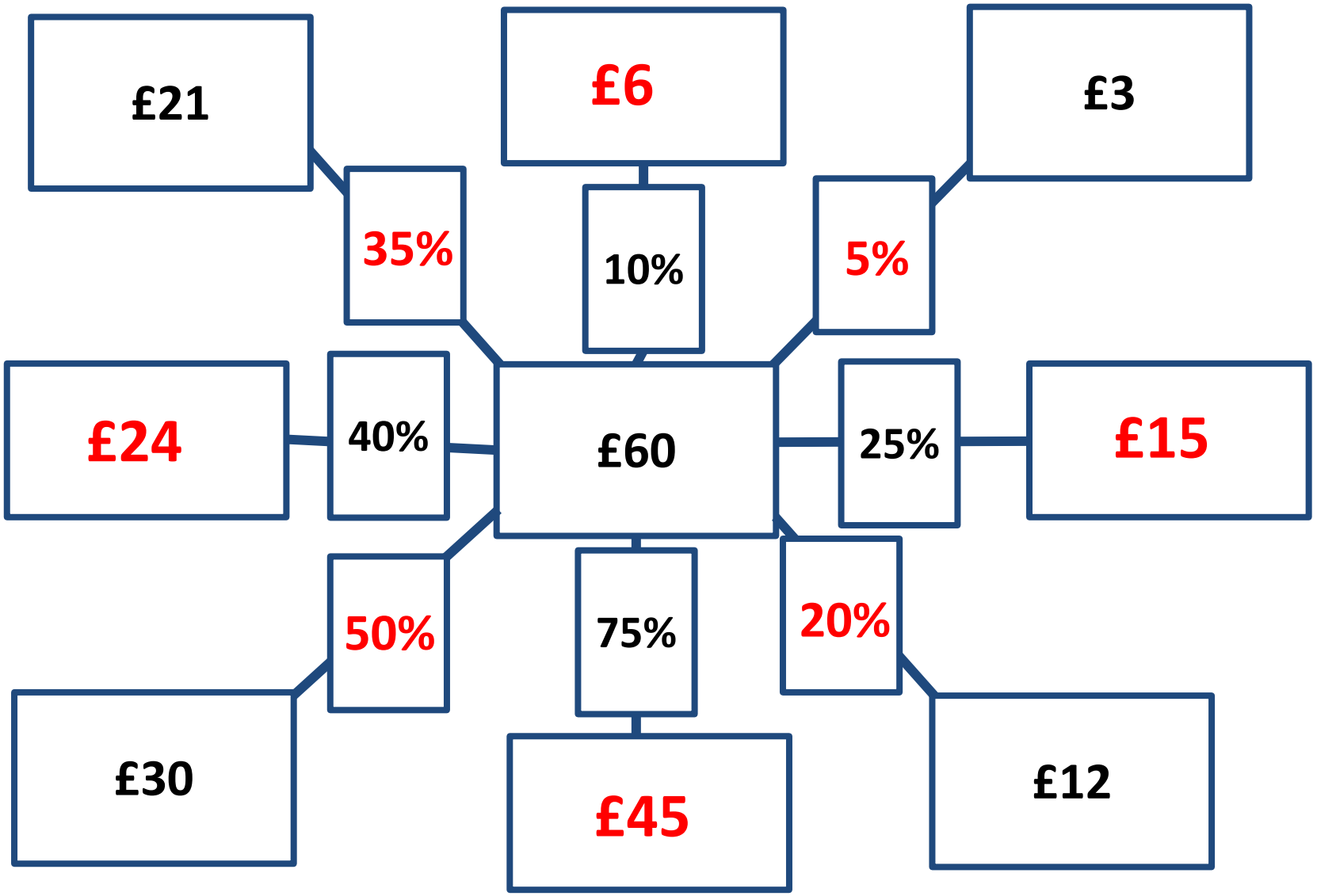
Finding other percentages

What do you remember?

80

10% =	÷ 10	8
50% =	÷ 2	40
25% =	÷ 4	20
20% =	÷ 5 (or x 10% by 2)	16
1% =	÷ 100	0.8
30% =	x 10% by 2	24


£21
£3
10%
40%
£60
25%
75%
£30
£12


£21
£6
£3
35%
10%
5%
£24
40%
£60
25%
£15
50%
75%
20%
£30
£45
£12

Friday

Whole school percentages week

Finding a percentage with a multiplier

Converting activity

You are going to need to convert percentages to decimals. To convert percentages you need to divide the percentage by 100.

CONVERT THE FOLLOWING PERCENTAGES

98%

0.98

75%

0.75

6%

0.06

9.9%

0.099

50%

0.5

45%

0.45

32%

0.32

0.5%

0.005

How to work a percentage USING A MULTIPLIER?

1. Convert the percentage into a decimal (percentage ÷ 100)
2. Multiply the decimal number by the amount

For Example:

Q) Find 60% of 90

Working out box:

60 ÷ 100 = 0.6

0.6 x 90 = 54

60% of 90 = 54

Answer is: 54

Have a go…

1. Work out 30% of 89 **0.3 x 89 = 26.7**
2. Work out 40% of 150 **0.4 x 150 = 60**
3. Work out 20% of 230 **0.2 x 230 = 46**
4. Work out 70% of 400 **0.7 x 400 = 280**
5. Work out 80% of 60 **0.8 x 60 = 48**