

PERCENTAGES

MNU 4-07a

I can choose the most appropriate form of fractions, decimal fractions and percentages to use when making calculations mentally, in written form or using technology, then use my solutions to make comparisons, decisions and choices.

Pupils should be able to:

- Understand the meaning of a percentage
- Mentally convert simple percentages to fractions
- Mentally find simple percentages of quantities
- e.g. 20% of £80
- With a calculator find any percentage of a quantity
- Estimate a percentage of a quantity mentally,
- eg 12% of £80 is a bit more than £8
- Calculate the new value of a quantity after a given percentage increase or decrease
- Apply to problems involving inflation, depreciation, interest on loans
- Express one quantity as a percentage of another
- Use this to calculate percentage profit and loss

PUPILS SHOULD COMPLETE THE FOLLOWING EXERCISE AND ASSESS THEIR PROGRESS BY TICKING ONE OF THE OPTIONS FOR EACH TOPIC IN THE TABLE BELOW

	DEVELOPING	CONSOLIDATING	SECURE
Mentally convert simple percentages to fractions and find simple % of quantities. (Question 1-2)			
Find percentages using a calculator- involving percentage increase or decrease, inflation, depreciation, interest on loans. (Questions 3 - 8)			
Express one quantity as a percentage of another. Calculate percentage profit and loss (Question 9 - 10)			

mymaths lessons: library/Number/Percentages/Percentages of Amounts 2
library/Number/Percentages/Percentage Change 1
library/Number/Percentages/Change as a percentage

SELF EVALUATION EXERCISE

DATE DUE _____

1. Mentally convert these percentages to fractions:

- a) 75% b) 40% c) 70% d) 3%

2. Do the following mentally:

- a) 15% of 80 b) 25% of 4800 c) 20% of 75 d) 1% of 400 e) 5% of 1.20

3) With a calculator find:-

- a) 16% of £80 b) 28% of £750 c) 4% of 90 d) 64% of £8.25

4) Of the 450 office workers in a call centre, 55% of them are woman.

- a) How many women are there? b) How many men are there?

5) There are 1400 pupils at Madras College, 43% of these pupils get a bus to school.

How many pupils do **not** get the bus?

6) During a storm I lost 9% of my roof tiles. If there were 650 tiles on the roof before the storm, how many do I have left?

7) Alan bought a new car which cost him £10, 500. It depreciated by 12% over the first year and 9% in the second year. How much is the car worth now?

8) Sam borrows £5, 000 from his local bank. The interest rate is 3.8%. How much interest will he be charged?

9) John scored 25 out of 40 for his maths exam. Write this mark as a percentage.

10) An enterprise company bought 150 calendars for £450 and sold them for £5 each. Calculate the profit made and the percentage profit