

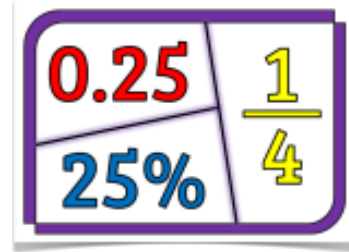
Y7 Unit 5 Overview-Fractions and Decimals

Test window: 22nd June 2020 – 3rd July 2020

Target grade for tests:

You will learn about:

- Place value
- Fractions and decimals



You will be able to:

- Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.
- Recognise and write decimal equivalents of any number of tenths or hundredths.
- Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.
- Add and subtract fractions with the same denominator.
- Solve problems involving fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.
- Recognise and show, using diagrams, families of common equivalent fractions.

Lesson Overview

EXPLORING FRACTIONS AND DECIMALS

- Recognise that hundredths arise from dividing a number or object into one hundred equal parts
- Write hundredths as a fraction and as a decimal
- Write decimal equivalents of any number of tenths and hundredths
- Count up in hundredths
- Count down in hundredths
- Divide a one-digit number by 10
- Divide a one-digit number by 100
- Divide a two-digit number by 10
- Divide a two-digit number by 100
- Know and use the decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$

CALCULATING FRACTIONS AND DECIMALS

- Add fractions with the same denominator within and beyond one whole
- Subtract fractions with the same denominator within and beyond one whole
- Calculate a unit fraction of an amount when the answer is a whole number
- Calculate a non-unit fraction of an amount when the answer is a whole number
- Identify equivalent fractions from diagrams
- Find families of equivalent fractions
- Create diagrams to show families of equivalent fractions
- Solve problems with increasingly harder fractions to calculate quantities

Key Words

Refer to <http://studymaths.co.uk/glossary.php> for definitions of the key words

Place value
Tenth, hundredth
Decimal
Divide
Fraction
Numerator
Denominator
Tenth
Hundredth
Decimal

Notation

Decimal point
t, h notation for tenths, hundredths

Fraction
Unit fraction, non-unit fraction
Improper fraction
Top-heavy fraction
Numerator, denominator
Add, subtract
Equivalent (fraction)
Family

Suggested reading or support/ challenge available



Support is available from a Maths teacher in 'MORALE' in M1 daily from 1:30pm -1:45pm

www.mymaths.co.uk
login: **penryn**
password: **octagon**

www.hegartymaths.com
Go to student login at the top... find your school, enter your details and then set up your password...

<https://vle.mathswatch.com/vle/>
login: school username followed by **@penryn-college**
password: **Penryn2016**

Use your revision guide
Use the code in the front of your guide to access your free online revision

www.justmaths.co.uk/online
login: **PenrynStudent**
password: **Penryn**

Cross curricular

SMSC:

- 1.1 Exploring, understanding and respecting cultural diversity e.g. exploration of different methods of multiplication (Chinese, Russian).
- 3.1 Developing personal qualities and using social skills (regular paired/ group work communication).
- 3.2 Participating, cooperating and resolving conflicts (paired/group activities).
- 4.2 Experiencing fascination, awe and wonder of mathematics.
- 4.4 Using imagination and creativity in learning.

Literacy:

Verbal communication of understanding using key words in the correct context. Development of written communication of methods and strategies to problem solve.

NAC:

Science – Multiply and divide whole numbers by 10 and 100. Calculate fractions of quantities. Recognise when two simple fractions are equivalent.

Technology – Multiply and divide whole numbers by 10 and 100.

MFL – Use decimal notation – money.

Research	
Note-making	
Group work & discussion	
Memorisation	
Precision & accuracy	
Independence	
Reflection	