

Teaching notes on 10.03 Roman numerals

Slide 1

Learning objective: To understand how to decode Roman numerals, including year dates

After saying 'salve' to Lucundus, mouse-clicks on this slide will make Lucundus ask, 'quid Latine est [picture cue]?' ('What is the Latin for ...?'). Students will be given a clue as to the start of the word: 'est m.....' – ('it is a ...'). The answer here is 'mater'.

Slide 2



A game of Word Roots Challenge in reverse, so pupils have to come up with English derivations from these Latin roots. They will have encountered these number words in Unit 6. Possible answers for these words include:

octo, eight – October*, octopus, octagon

decem, ten – December*, decimal, decade, decagon, decathlon

duo, two – duet, duel, duplex, duplicitous (two-faced)

centum, hundred – century, centurion, centimeter, cent, centipede, centenary, percent

unus, one – unique, unit, unicycle, universe, unison, union, unicorn

novem, nine – November*

mille, thousand – millimeter, million, millipede, millennium, millefiori

Why does October have 'eight' in its name when it's not the eighth month? Or November ('nine') or December ('ten'). It's because the Romans didn't have January as the first month of the year, but March. July used to be called 'Quintilis' ('fifth'), but had its name changed to honour Julius Caesar. August used to be called 'Sextillia' ('sixth') but had its name changed to honour Caesar Augustus. January only became the first month when Pope Gregory changed the calendar system in 1582.

Slide 3

Just as Romans had different words for their numbers, they also had a different way of writing them. Our modern numbers are based on an Arabic system but the Romans used letters to represent numbers. Knowing how to decode Roman numerals is useful for the odd occasions in modern life where it crops up such as clocks, inscriptions, SATS papers. No picture to illustrate this (!), but some people use Roman numerals in tattoos. David Beckham has his lucky number tattooed on his arm (VII – 7).

Slide 4

Instead of the numbers that we use today, Romans represented numerical values using letters. The students may know some of these already.

[Mouse click 1] M

[Mouse click 2] 1000

[Mouse click 3] I

[Mouse click 4] 1

[Mouse click 5] X

[Mouse click 6] 10

[Mouse click 7] C

[Mouse click 8] 100

[Mouse click 9] D

[Mouse click 10] 500

[Mouse click 11] V

[Mouse click 12] 5

[Mouse click 13] L

[Mouse click 14] 50

One of the hardest things to remember is which letter represents which number, but there's a helpful mnemonic. All of the letters appear in descending order in the phrase 'medical Xavier' as you go along the string from left to right [mouse click 15 & 16]. This especially helps with the confusing between D (500) and L (50).

Slide 5

In order to express numbers, Roman numerals are combined in strings. The rule goes that if the numerals are the same size or smaller as you go along the string, you add them. The example used here is XXXVII (mouse clicks show how the numerals combine).

Slide 6

Now for the tricky bit. If you get a smaller numeral followed by a bigger numeral, you have to subtract the smaller from the bigger, and then add it to the total (mouse clicks show how the numerals combine).

Slides 7-12

Now we're going to have a practice at Roman numeral strings by decoding Roman tombstones. The first (Flavius, slide 7) explains and models the inscription on mouse-click. The pupils (in pairs or separately) then need to work out how old these Romans were when they died. Slide 12 gives the answers on mouse click:

Flavius – 25

Cornelia – 61

Salvius – 90

Quintus – 24

Barbilla – 43

Slides 13-15

...and ready for the really tricky stuff – year dates. This works on the same principle as all Roman numerals that we just recapped, but year dates can get very long!

Slide 13 shows an easy example (MMXVII), Slide 14 a slightly trickier one (MMIX) and Slide 15 is a real decoding challenge (MCMLXIV). The mouse clicks on each slide will break down how the string of numerals is interpreted.

Slide 16



Introduces a game of Roman numeral bingo. In the lesson's worksheet, you will find a caller's card for the teacher and 30 bingo cards for pupils. Each card contains a selection of

easy, medium and tricky numerals, including dates. The caller's card is annotated with the modern numbers for ease. Call out these modern numbers (while marking on the card what you've called), and the pupils have to mark the corresponding Roman numeral off their card. If a pupil calls 'bingo', go through the numbers to make sure they're right. If time allows, play for a full house: pupils could even shout out 'villa!'

Slide 17

The plenary slide:

Question 1 How old are you in Roman numerals? [could be anything from VII (ish!) upwards]

Question 2 In Roman numerals, in which year were you born? [again, a variety of answers are possible. You can always write your birth year in Roman numerals on the board and see if the class can work out your age!]

Question 3 decem digitos habes? ['ita vero', usually]