Mathematics at Sylvania Heights Public School
2014

New syllabus implementation timeline

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Source: Board of Studies NSW
Overview of the syllabus: aims

- develop an increasingly sophisticated understanding of mathematical concepts and fluency with mathematical processes... to pose problems and reason...’
- Increasingly sophisticated- needs a continuum to see the progress of development (WM outcomes)
- Understanding of concepts- links to quality teaching question *Why does this learning matter?*
- Fluency with processes- use flexible and efficient strategies links with the Numeracy continuum
Key Features K-10

Increased focus on recording
Increased focus on solving word problems
increased focus on modelling, ordering, identifying and "using the term" (correct and appropriate mathematical language)

Similarities and Differences K-6

Please note: Year 7 start the new syllabus in 2014, K-6 is not mandatory until 2015. This means some students may be required to have certain understandings of concepts in year 7 that they have not learned in year 6. There may be gaps in their understanding.

With this in mind, Stage 3 teachers are exploring some of the new topics this year as an extension of current content to assist in this area.

- Whole Number- HCF, LCM, integers
- Multiplication and Division- order of operations
- Fractions and Decimals- x and ÷ decimals
- Patterns and Algebra- number (Cartesian) plane
- Data- categorical and numerical data, dot plots

We are also receiving support from Michael Lucas, head mathematics teacher at Sylvania High, for support and training.
Similarities and Differences K-6

Current: ES1
- word rows used for multiplication

New: ES1
- word "groups only is used not rows
- equal arm balance and sorting on the basis of mass moved to S1

Similarities and Differences K-6

Current: S1
- standard partitioning
- 1/2, 1/4
- Equal - arm balance
- 1/2 hour clock reading
- corner
- Tessalations
- angles

New: S1
- partitioning of numbers into non standard forms
- movement of some content from PAS to Number
  - 1/8
  - Pan balance
  - 1/4 hour clock reading
  - Flat and curved surfaces
  - vertex
  - half and quarter turns
Similarities and Differences K-6

Current: S2
- Standard partitioning
- Up to four-digit
- Adding and subtracting with money
- $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}$
- Percentages
- Cross sections
- Constructing 2D shapes

New: S2
- Partitioning of numbers into non standard forms
- Up to five - digits
- Calculating equivalent amounts of money and solving problems
- $\frac{1}{3}, \frac{1}{5}$, mixed numerals
- Temperature
- Constructing irregular 2D shapes
- Combining 2D shapes
- Comparing chance events

Current: S3
- Factors
- Roman numerals
- Square Numbers
- Positive and Negative numbers
- Solve problems involving money
- Speed (in measurement)

New: S3
- HCF, LCM (from stage 4)
- Solving problems with factors
- Square and triangular numbers
- Uses word integer
- Create a financial plan
- Using area model for multiplication
- Speed (in multiplication)
- Order of operations
- Percentages only in Stage 3 part 2
Similarities and Differences K-6

New: S3
- adding mixed numerals
- content moved both up and down and across (WM) into Fractions and decimals 2
- Cartesian plane (from stage 4)
- investigating areas of triangles
- cross-sections (up from Stage 2)
- translation and rotations with shapes
- Adjacent angles
- categorical and numerical data, dot plots
- frequencies and equally likely events

K - 2
Integers

Order of Operations

Rounding

Ipads - $100 per year.

Student Resources

$5066.75
Teacher Resources

Targeting Maths - $497.79
Upgrade licence - $539.55
Targeting Maths - $1364.03
Maths Syllabus - $356.08
Challenge books - $47.27
Envision Maths - $450
Oxford Assessment - $454.36

Total - $3709.08

Any Questions?