Kreuzschwestern
LISA-JUNIOR International School

Grade 2 Mathematics
2016 - 17

Learning Objectives :
Number
Review from Grade 1: Fluency with + and - up to 30 with and without crossing the tens boundary (ex. 14+3, 14+8, 14-3, and 14-8)
Read, write and model numbers, using the base 10 system, to 100 including working with place value and using number rays
Distinguish the difference between value and digit (in the number 54, the digit 5 has a value of 50)
Doubling and halving to aid in fluency of operations
Estimate quantities to 100 including rounding to the 10s place
Reasonably estimate answers: rounding and approximation
Count, compare and order numbers up to 100 including using the symbols =, ≠, <, >
Use number patterns to learn multiplication tables: up to 10 x 10
Automatically recall multiplication tables up to 10 x 10 with fluency
Automatically recall division fact tables up 100
Automatically recall basic addition and subtraction facts with fluency (for example with xtramath)
Addition and subtraction equations to 100 (with and without crossing the tens boundary). This includes: 2-digit and 1-digit number (54 + 3, 54 + 8, 54 – 3, and 54 - 8), 2-digit number with a multiple of 10 (54 + 10 and 54 - 10), and a 2-digit number with a 2-digit number (54 + 23, 54 + 37, 54 – 23, and 54 - 37)
Simple math tricks to help with crossing the tens boundary (eg. 35+9 = 35+10-1= or 35+11= 35+10 +1)

Delving into different operation relations: finding neighbours, breaking down numbers (64 = 60 + 4, 80 = 2 x 40), comparing numbers (10 + 2 = 6 x 2)
Use mathematical vocabulary and symbols of addition, subtraction, multiplication and division: difference, sum, multiply, divide, product, quotient
Read, write and model multiplication and division problems
Select and explain an appropriate method for solving a problem
Real-life word problems using each of the four operations with numbers from 30 - 100
Pattern and Functions
Analyse patterns in number systems to 100
Recognize, describe and extend more complex patterns in numbers
Understand and use the relationship between addition and subtraction: 34 + 3 = 37, 37 – 3 = 34
Identify patterns and rules for multiplication and division; 4 x 3 = 12, 3 x 4 = 12, 12:3 = 4, 12:4 = 3
Model, with manipulatives, the relationship between addition and multiplication (repeated addition)
Model, with manipulatives, the relationship between division and subtraction
Model multiplication as an array
Real-life word problems using patterns with numbers from 30 – 100
Measurement
Estimate, measure, label and compare using formal methods and standard units of measurement: length, mass, time and temperature
Select appropriate tools and units of measurement

Measuring length: m, cm, mm introduced, measured with ruler and basic conversions (never to be higher than 100)
Measuring weight: kg, dag, g introduced with basic conversions (never to be higher than 100)
Model addition and subtraction using money
Measuring money: Euro and cent and basic conversions
Read and write the time to the full hour, half hour, and quarter hour with analog and digital clocks with 12/24 hour time including am and pm
Measuring time: min, hour, day, week, month, year and basic conversions including measuring elapsed time (never to be higher than 100) for example 24 hours = 1 day, 7 days = 1 week
Real-life word problems with measurement with 1 step working towards 2 steps with numbers from 30 - 100
Shape and Space
Identify, describe and model congruency in 2-D shapes (square, rectangle, hexagon, triangle, pentagon including number of sides and corners)
Identify and describe 3-D shapes (cube, cone, sphere, cylinder, pyramid, including number of faces, edges, and vertices)
Get to know the terms: round/angled, straight/bent, open/closed
Combine and transform 2-D shapes to make another shape
Exercise for orientation – easy maps, treasure hunts
Can follow simple directions, describing paths, regions and boundaries: left, right, forward, backward, inside, outside, above, under, in front, behind, next to, between, in the middle
Locate features on a grid using coordinates
Discover symmetries (term “symmetry axis”)
Real-life word problems with shape and space
Data Handling
Discuss, compare and create sets from data that has subsets

using tree, Carroll, Venn and other diagrams (tally, bar graph, pictogram)
Design a survey, process and interpret the data
Collect and display data in a bar graph and interpret results by comparing quantities: more, fewer, less than, greater than, difference
Real-life word problems with data handling with numbers from 30 – 100