Connecting with the Australian Curriculum: Mathematics

Bob's Buttons

Year Levels: F-8

Proficiency Strands: Understanding, Fluency, Problem Solving, Reasoning

General Capabilities: Literacy, Numeracy, ICT Capability, Critical and Creative Thinking

Content Strands: Number and Algebra, Statistics and Probability

Number and Algebra

Foundation: Represent practical situations to model addition and sharing (ACMNA004)

Year 1: Develop confidence with number sequences to and from 100 by ones from any starting point. Skip count by twos, fives and tens starting from zero (ACMNA012)
Investigate and describe number patterns formed by skip counting and patterns with objects (ACMNA018)

Year 2: Recognise and represent multiplication as repeated addition, groups and arrays (ACMNA031)
Recognise and represent division as grouping into equal sets and solve simple problems using these representations (ACMNA032)

Year 3: Recall multiplication facts of two, three, five and ten and related division facts (ACMNA056)
Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies (ACMNA057)

Year 4: Investigate number sequences involving multiples of 3, 4, 6, 7, 8, and 9 (ACMNA074)
Recall multiplication facts up to 10 × 10 and related division facts (ACMNA075)
Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder (ACMNA076)
Explore and describe number patterns resulting from performing multiplication (ACMNA081)
Solve word problems by using number sentences involving multiplication or division where there is no remainder (ACMNA082)

Year 5: Identify and describe factors and multiples of whole numbers and use them to solve problems (ACMNA098)
Solve problems involving multiplication of large numbers by one- or two-digit numbers using efficient mental, written strategies and appropriate digital technologies (ACMNA100)
Solve problems involving division by a one digit number, including those that result in a remainder (ACMNA101)
Use efficient mental and written strategies and apply appropriate digital technologies to solve problems (ACMNA291)

Year 6: Identify and describe properties of prime, composite, square and triangular numbers (ACMNA122)
Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers (ACMNA123)
Continue and create sequences involving whole numbers, fractions and decimals. Describe the rule used to create the sequence (ACMNA133)

Year 7: Introduce the concept of variables as a way of representing numbers using letters (ACMNA175)
Extend and apply the laws and properties of arithmetic to algebraic terms and expressions (ACMNA177)

Year 8: Simplify algebraic expressions involving the four operations (ACMNA192)

Statistics and Probability

Year 2: Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording (ACMSP068)

Year 3:   Select and trial methods for data collection, including survey questions and recording sheets (ACMSP095)

Year 4:   Pose questions and collect categorical or numerical data by observation or survey (ACMSP118)