

## FIRST YEAR

### NATURAL NUMBERS

Contents	Game	Objectives
Divisibility. Numbers Primes and composites. Perfect square	Auction Numbers	Automating divisibility criteria (2,3,5,7,11) Distinguishing prime numbers from composite numbers Distinguishing perfect squares to 100
Decomposition in prime factors. HCF / l.c.m (l.c.m =lowest common multiple) (HCF = highest common factor)	Messenger	Practicing factorial decomposition and calculation power. Automating the calculation of HCF and l.c.m.
Exact square roots and whole roots	Spiral of fortune I	Acquiring the concept of square root of a whole number and the approximate solution

### NATURAL NUMBERS

Contents	Game	Objectives
Operations with whole numbers	Sum Bingo Multiplication Bingo Combined Bingo	Automation calculation of addition and multiplication of integers
Operations with whole numbers	Octopus	Automation of the calculation of the sum, multiplication and division of whole numbers
Representation in a Cartesian coordinate system	Battleship fleet	Locating points on a cartesian coordinate system

## RATIONAL NUMBERS

Contents	Game	Objectives
Fractions Recognition	Dominoes I	Identifying equal parts
Equivalent fractions	Dominoes II	Identifying equivalent fractions
Addition and subtraction of fractions	Market Fractions	Justifying the method of calculation of fractions with different denominator
Multiplication and division of fractions	Grand Prix	Mechanisms to automate the calculation of multiplication and division of fractions

## ALGEBRA

Contents	Game	Objectives
Algebraic language	The language of mathematics	Translating from the ordinary language into the algebraic language
Problems with first-degree equations	We will solve the problem I	Starting in solving equations with first-degree

## GEOMETRY\*

Contents	Game	Objectives
Length of the circumference	Measure the circumference	Reproducing the calculation of the number $\pi$
Pythagoras' Theorem	Pythagorean triplets	Studying the Pythagoras' Theorem

\* This section will be completed in the coming years.

## GENERAL

<b>Contents</b>	<b>Game</b>	<b>Objectives</b>
<b>Revision</b>	<b>Mathematic goose</b>	<b>Review of concepts and mathematical algorithms</b>