



Growing together to achieve international success

## **Extract from the didactic programming for the area of Mathematics**

**1st year of Primary Education Year 2023/2024**

**SPANISH INSTITUTE VICENTE CAÑADA BLANCH**

**LONDON**

1. Extract from the didactic programme for the area of MATHEMATICS 1st year of Primary Education.

EVALUATION CRITERIA	BASIC KNOWLEDGE
<p>1.1 Understand questions posed through different strategies or tools, recognising the information contained in everyday problems.</p> <p><b>1ST QUARTER</b> <b>2ND QUARTER</b> <b>3RD QUARTER</b></p>	<p><b>D. Algebraic sense.</b></p> <p>1. Patterns. - Strategies for identification, oral description, discovery of hidden elements and extension of sequences from regularities in a collection of numbers, figures or pictures. Mathematical modelling. - Guided modelling process (drawings, diagrams, diagrams, manipulatives, dramatizations...) in understanding and solving everyday problems. 3. Relationships and functions. - Expression of equality and inequality relations by means of the signs = and <math>\neq</math> between expressions including operations - Representation of equality as an expression of an equivalence relation between two elements and obtaining simple unknown data (represented by means of a symbol) in any of the two elements. 4. Computational thinking. - Strategies for the interpretation of simple algorithms without the use of technological components (routines, instructions with ordered steps...).</p>
<p>1.2 Provide examples of representations of simple problem situations, with manipulative and graphic resources that help in the resolution of a problem of everyday life.</p> <p><b>1ST QUARTER</b> <b>2ND QUARTER</b> <b>3RD QUARTER</b></p>	

<p>2.1. Employ some appropriate problem-solving strategies.</p> <p><b>1ST QUARTER</b> <b>2ND QUARTER</b> <b>3RD QUARTER</b></p> <p>2.2 Obtain possible solutions to problems, in a guided manner, applying basic problem-solving strategies.</p> <p><b>1ST QUARTER</b> <b>2ND QUARTER</b> <b>3RD QUARTER</b></p> <p>2.3. Verbally describe the suitability of the solutions to a problem on the basis of the questions previously posed.</p> <p><b>3RD QUARTER</b></p>	<p><b>A. Number sense.</b></p> <p>1. Counting. - A variety of systematic counting and tallying strategies in everyday situations in quantities up to 100. 2.. Quantity. - Reasoned estimates of quantities in problem-solving contexts. - Reading, representation (including on the number line and with manipulatives), composition, decomposition and recomposition of natural numbers up to 999. - Representation of the same quantity in different ways (manipulatively, graphically or numerically) and strategies for choosing the appropriate representation for each situation or problem. Sense of operations. - Mental calculation strategies with natural numbers up to 100. - Addition and subtraction of natural numbers solved with flexibility and sense: usefulness in contextualised situations, solving strategies and tools, and properties. 4. Relationships. - Base ten number system (up to 100): application of the relations it generates in operations. - Natural numbers in everyday contexts: comparison and ordering. - Relationships between</p>
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addition and subtraction: application in everyday contexts.

3.1. Make simple mathematical conjectures, investigating patterns, properties and relationships in a guided way.

2ND QUARTER  
3RD QUARTER

3.2. Give examples of problems from everyday situations that are solved mathematically.

2ND QUARTER  
3RD QUARTER

**B. Meaning of measurement.**

Magnitude.

- Measurable attributes of objects (length, mass, capacity), distances and times.
- Conventional (metre, kilo and litre) and non-conventional units in everyday situations.
- Units of time (year, month, week, day and hour) in everyday situations.

2. Measurement.

- Processes for measuring by repeating a unit and by using conventional (rulers, tape measures, scales, calendars...) and non-conventional instruments in familiar contexts.
- Estimation and relationships.

- Strategies for direct comparison and ordering of measurements of the same magnitude.
- Estimation of measurements (distances, sizes, masses, capacities...) by direct comparison with other measurements.

<p>4.1. Describe simple step-by-step routines and activities of everyday life, using basic principles of computational thinking in a guided way.</p> <p><u>2ND QUARTER</u></p>	<p><b>D. Algebraic sense.</b></p> <p>1. Patterns - Strategies for identification, oral description, discovery of hidden elements and extension of sequences based on regularities in a collection of numbers, figures or images. 2. Mathematical modelling - Guided process of modelling (drawings, diagrams, diagrams, manipulatives, dramatizations...) in understanding and solving everyday problems. 3. Relationships and functions.- Expression of equality and inequality relationships by means of the signs = and <math>\neq</math> between expressions that include operations.- Representation of equality as an expression of an equivalence relationship between two elements and obtaining simple unknown data. (represented by means of a symbol) in either of the two elements. 4. Computational thinking - Strategies for the interpretation of simple algorithms without the use of technological components (routines, instructions with ordered steps, etc.).</p>
<p>4.2. Use appropriate technological tools, in a guided manner, in the problem-solving process.</p> <p><u>3RD QUARTER</u></p>	

<p>5.1. Recognise connections between different mathematical elements, applying own knowledge and experience.</p> <p><u>2ND QUARTER</u> <u>3RD QUARTER</u></p> <p>5.2. Recognise the mathematics present in everyday life and in other areas, establishing simple connections between them.</p> <p><u>1ST QUARTER</u></p>	<p><b>C. Spatial sense.</b> 1. Two- and three-dimensional geometric shapes. - Simple two-dimensional geometric shapes in everyday objects: identification and classification according to their elements. - Strategies and techniques for constructing simple one- and two-dimensional geometric figures manipulatively. - Basic geometric vocabulary: verbal description of the elements and properties of simple geometric figures. - Properties of two-dimensional geometric shapes: exploration using manipulatives and digital tools. 2. Location and systems of representation. - Relative position of objects in space and interpretation of movements: description in reference to oneself using appropriate vocabulary (above, below, in front of, behind, between, closer than, less close than, further than, less far than, less far than...). 3. Geometric visualisation, reasoning and modelling. - Geometric models in solving problems related to the other senses of mathematical knowledge. - Geometric relations: recognition in the environment. E. Stochastic sense. Organisation and analysis of data. - Strategies for recognising the main elements and extracting relevant information from simple statistical graphs of everyday life (pictograms, bar graphs...). - Simple strategies for collecting, classifying and counting qualitative and quantitative data in small samples. - Representation of data obtained through counting using simple statistical graphs and manipulative and technological resources.</p>
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<p>6.1. Recognise simple mathematical language present in everyday life, acquiring basic specific vocabulary.</p> <p><u>2ND QUARTER</u> <u>3RD QUARTER</u></p>	<p><b>E. Stochastic sense.</b> Organisation and analysis of data. - Strategies for recognising the main elements and extracting relevant information from simple statistical graphs of everyday life (pictograms, bar charts...). - Simple strategies for collecting, classifying and counting qualitative and quantitative data in small samples. - Representation of data obtained through counting using simple statistical graphs and manipulative and technological resources.</p>
<p>6.2. Explain simple mathematical ideas and processes, the steps followed in solving a problem or the mathematical results, verbally or graphically.</p> <p><u>3RD QUARTER</u></p>	

<p>7.1. Recognise one's own basic emotions when dealing with mathematical challenges, asking for help only when necessary.</p> <p><u>1ST QUARTER</u> <u>2ND QUARTER</u> <u>3RD QUARTER</u></p>	<p><b>F. Socio-affective sense.</b> 1. Beliefs, attitudes and emotions. -Emotional management: strategies for identifying and expressing one's own emotions in mathematics. Curiosity and initiative in learning mathematics. Strategies for decision-making in problem-solving situations. Promoting autonomy and decision-making strategies in problem-solving situations.</p>
<p>7.2. Express positive attitudes towards mathematical challenges, valuing error as an opportunity for learning.</p> <p><u>1ST QUARTER</u> <u>2ND QUARTER</u> <u>3RD QUARTER</u></p>	

<p>8.1. Participate respectfully in teamwork, establishing healthy relationships based on respect, equality and the peaceful resolution of conflicts.</p> <p><u>2ND QUARTER</u> <u>3RD QUARTER</u></p>	<p><b>F. Socio-affective sense.</b> 2. Teamwork, inclusion, respect and diversity. -Identification and rejection of discriminatory attitudes towards individual differences in the classroom. Inclusive attitudes and acceptance of group diversity. - Active participation in teamwork: positive interaction and respect for the work of others. - Recognition and understanding of others' emotions and experiences of mathematics. -</p>
<p>8.2. Accept the task and role assigned in teamwork, fulfilling individual responsibilities and contributing to the achievement of the group's objectives.</p> <p><u>2ND QUARTER</u> <u>3RD QUARTER</u></p>	

## Timing of projects

The school's project for the current academic year will be "Around Spain in 80 days".

<b><u>DRAFT 1</u></b>	<b>Getting to know Andalusia, Galicia, Cantabria, Navarre, Asturias and Basque Country</b>	7 September- 20 December <b>1st Quarter.</b>
<b><u>DRAFT 2</u></b>	<b>We travel to the Canary Islands, Balearic Islands, Valencia, Aragon, Extremadura and Castilla-Leon.</b>	8 January - 28 March <b>2nd Quarter</b>
<b><u>DRAFT 3</u></b>	<b>We finish our journey through Catalonia, Madrid, Castilla La Mancha, La Rioja, Murcia and the autonomous cities of Ceuta and Melilla.</b>	15 April - 4 July <b>3rd Quarter</b>

## 2. Methodology

### Methodological principles of the centre

The methodological principles valid for all areas, activities and projects are:

- The globalising approach of the contents, so that the activities carried out by the pupils involve an interrelation between the different areas and proposals.
- The motivation of pupils in the teaching-learning process will be based on situations that provoke their interest and hold their attention, either because they respond to their experiences and needs or because of their playful and imaginary significance.
- The need to guarantee functional learning, ensuring its use by the learner when needed, both in the practical application of the knowledge acquired and in its use to carry out new learning.
- To favour group and team learning in order to promote relations between equals, providing guidelines that allow for confrontation and modification of points of view, coordination of interests, collective decision-making, mutual help and overcoming conflicts through dialogue and cooperation, thereby overcoming all forms of discrimination.

- Teaching will be active: understood in a double sense (on the one hand, as a way for pupils to learn autonomously and, on the other hand, to establish strategies that lead to activity in all aspects: manipulative, motor and cognitive).
- The diversity of the pupils will be taken into account, taking into account the peculiarities of each group, the characteristics of children of different origins and abilities, of different learning pace, etc.
- Adapt the use of different resources (materials, manipulatives, texts, audiovisual and computer) to the objectives pursued.
- The evaluation will serve as a reference point for pedagogical action in order to adapt the teaching process to the real progress of the pupils.
- The aim of education is the full development of the pupils' integral personality. In this development, at least two main aspects can be distinguished: cognitive development and emotional development. This is why we must dedicate time to work on the following objectives:
  - Acquire a better understanding of one's own emotions.
  - Identifying the emotions of others.
  - Develop the ability to control one's own emotions.
  - Prevent the harmful effects of negative emotions.
  - Develop the ability to generate positive emotions.
  - Develop greater emotional competence.
  - Develop the ability to be self-motivated.
  - Adopt a positive attitude towards life.

### **3. Cross-cutting content: British values and protected characteristics.**

The area will work transversally on the so-called "British values", common to the transversal elements included in our regulations:

- Democracy:

-Democratic voting during the development of the classes in the area for the taking of different collective decisions.

-The rule of law

-Poster in the classroom, in a visible place, showing: "The rule of law".

-Individual liberty:

Encouragement of individual decision-making, through the choice of different projects, personal work and in-depth studies to be carried out in the area.

-Mutual respect for the tolerance of those with different faiths and beliefs and for those without faith:

-Respect for cultural differences, beliefs and levels of intellectual and motor development that students may present during the development of classes in the area.

In addition, attention will also be paid to respect for protected characteristics ( race, religion or belief, gender reassignment, pregnancy and maternity and disability), fostering respect for all persons and non-discrimination on grounds of sex, race, religion, beliefs and whatever the personal circumstances of the members of the educational community.

#### 4. Evaluation

##### Procedures

	DIRECT OBSERVATION	COOPERATIVE WORK	TESTS	INDIVIDUAL PRODUCTIONS
ORAL EXPRESSION	Heading	Heading	--	Heading
WRITTEN EXPRESSION	Heading	Heading	Written	Heading
ORAL COMPREHENSION	Questions	Questions	--	Questions
READING COMPREHENSION	Questions	Questions	Escritas	Questions
LOGICAL-MATHEMATICAL REASONING	Heading	Heading	Escritas	Heading
ARTISTIC EXPRESSION	Questions	Productions	Productions	Heading

##### Evaluation moments

- **Initial.**
- Its main objective is to analyse the situation of each pupil before starting a specific teaching-learning process.
- Its purpose is to raise awareness (teachers and students) of the starting points, and thus to be able to adapt the process to the needs detected.
- **It continues.**
- It consists of carrying out tests periodically throughout the project, in order to assess the students' learning process and improve it as the course progresses and the projects advance.



- Its purpose is to assess the pedagogical evolution of the pupil and to improve the teaching-learning process itself, both for the teacher and the pupils.
- **Final.**
- It is carried out when the period of time dedicated to the teaching of a certain content has come to an end. It serves to detect what the student has not yet internalised, as well as certain aspects of the teaching that should be modified.
- Its purpose is qualification, although it can also have a formative-regulatory function by proposing tasks to the students for the aspects to be improved.

		<b>INITIAL</b>	<b>DURING THE DEVELOPMENT OF THE PROJECT (CONTINUED)</b>	<b>FINAL</b>
<b>EVALUATION MOMENTS</b>	<b>WHEN?</b>	Start of the project	Central development weeks	During and at the end of each project

### Techniques and instruments

- **The observation, carried out through:**
  - Checklists (daily tasks).
  - Observation scales (to check the level of involvement in teamwork).
  - Daily work in the classroom.
  - Classroom participation.
  - Project workbook (to check construction of personal 'textbook')
  - Classroom assemblies (to deal with day-to-day issues and for conflict resolution).
- **Task analysis, through:**
  - Feedback (for performance improvement)
  - Analysis of digital or paper productions (individual or collective).
  - Analysis of oral presentations (individual or collective).
  - Analysis of the tasks reported in the classroom.
- **The evidence, through:**
  - Digital or paper-based cooperative composition and development tests.
  - Digital or paper-based individual composition and development tests.
  - Objective tests, short in form and with a choice of answers.
  - Digital time-response tests (Kahoot/Plickers)
- **Self-assessment, through:**
  - Evaluation targets
- **Co-evaluation, through:**
  - Teamwork rubrics (to determine the evolution and functioning of the group in the project).
  - Evaluation targets (to determine the involvement of each team member in the teamwork)

		<b>PARTICIPATION IN THE CLASSROOM</b>	<b>REFERENCES</b>	<b>EVALUATION TARGETS</b>	<b>PROJECT WORKBOOK</b>	<b>DIGITAL NOTEBOOK</b>
<b>ASSESSMENT TOOLS</b>						
		<b>DRIVE FORMS</b>	<b>DIGITAL APPLICATIONS</b>	<b>DIGITAL CO-OPERATIVE TESTING</b>	<b>INDIVIDUAL DIGITAL TESTS</b>	<b>INDIVIDUAL TESTS ON PAPER</b>
		<b>PAPER-BASED COOPERATIVE TESTING</b>	<b>ORAL PRESENTATIONS</b>	<b>DIGITAL PRODUCTS</b>	<b>PAPER PRODUCTS</b>	<b>DIRECT OBSERVATION</b>
		<b>DAILY CLASSROOM WORK</b>	<b>TASKS</b>			

The weighting for the qualification of each term will be carried out in the different evaluation criteria (point 1) marked for the first cycle of primary school by the LOE-LOMLOE.