

Extract from the Mathematics programme for the 6th year of Primary Education.



**EXTRACT FROM THE MATHEMATICS PROGRAMME
FOR YEAR 6 OF PRIMARY EDUCATION**

Extract from the Mathematics programme for the 6th year of Primary Education.



1.- Sequencing of the assessment criteria of the specific competences and associated knowledge.

FIRST TERM

| Learning situation | Basic knowledge |
|----------------------------------|---|
| <p>1. Geography Spain</p> | <p>A.Number sense.</p> <p>1. Counting.</p> <p>- Various counting strategies, systematic counting and adapting counting to the size of numbers in everyday situations. Making tables, sorting cases, establishing a criterion, making graphical schemes. Skip counting, rearranging items, counting a small part of the collection to count the rest, etc.</p> <p>2.Quantity.</p> <p>- Estimates and reasoned approximations of quantities, over and under, in problem-solving contexts, to any order of unity and decimals to the nearest tenth and hundredth. Use of the calculator.</p> <p>5.Proportional reasoning.</p> <p>- Solving problems of proportionality, percentages and scales in everyday life, by means of equality between ratios, reduction to unity or the use of proportionality coefficients.</p> <p>2. Teamwork, inclusion, respect and diversity.</p> |

Extract from the Mathematics programme for the 6th year of Primary Education.



| | |
|--|---|
| <p>2. I relate (well) in networks</p> | <p>- Application of simple techniques for teamwork in mathematics, and strategies for conflict management, promotion of empathetic and inclusive behaviour and acceptance of diversity in the classroom and in society.</p> <p>E.Stochastic sense.</p> <p>1. Organisation and analysis of data.</p> <ul style="list-style-type: none"> - Statistical data sets and graphs of everyday life: description, interpretation and critical analysis. - Simple statistical graphs (bar chart, pie chart, histogram, etc.): representation of data using traditional and technological resources and selection of the most suitable one. <p>F.Socio-affective sense.</p> <p>2. Teamwork, inclusion, respect and diversity.</p> <ul style="list-style-type: none"> - Application of simple techniques for teamwork in mathematics, and strategies for conflict management, promotion of empathetic and inclusive behaviour and acceptance of diversity in the classroom and in society. <p>D.Algebraic sense.</p> <p>4.Computational thinking.</p> <ul style="list-style-type: none"> - Strategies for the interpretation, modification and creation of simple algorithms (sequences of ordered steps, diagrams, simulations, repetitive patterns, loops, nested and conditional instructions, computational representations, block programming, educational robotics...). |
|--|---|

Extract from the Mathematics programme for the 6th year of Primary Education.



SECOND TERM

| Learning situation | Basic knowledge |
|-----------------------------------|--|
| <p>3. Modern Age</p> | <p>C.Spatial sense.</p> <p>1. Two- and three-dimensional geometric shapes. - Geometric shapes (trapezoids, rhombuses, kites, compound polygons, polyhedra and round bodies) in everyday objects: identification and classification according to their elements and the relationships between them. - Techniques for the construction of geometric figures by composition, decomposition and superposition, using manipulative materials (puzzles, geoplanes, etc.), drawing instruments and computer applications.</p> |
| <p>4. Contemporary Age</p> | <p>4.Visualisation, reasoning and geometric modelling.</p> <p>- Strategies for calculating areas and perimeters of plane figures (deduction of formulas, use of geometric properties to determine unknown measurements, composition and decomposition of figures...) in everyday situations. - Geometric models in solving problems related to the other senses. - Making conjectures about geometric properties, using drawing instruments (compass and protractor) and dynamic geometry programmes. - Geometric ideas and relationships in art, science and everyday life.</p> |

THIRD TERM

| Learning situation | Basic knowledge |
|--|--|
| <p>5. European Union</p> <p>6. Sustainable Development Goals</p> | <p>. 2. Quantity.</p> <p>- Reading, representation (including the number line and with manipulatives), composition, decomposition and recomposition of natural numbers and decimals to thousandths, in the different orders of units, recognising and using their notation appropriately.</p> <p>- Fractions and decimals to express quantities in everyday contexts and choosing the best representation for each situation or problem.</p> <p>4.Relations</p> <p>. - Base ten numbering system (natural numbers and decimals to thousandths): application of the relations it generates in operations. Multiplication by the unit followed by zeros and its relationship with dividing by the unit. Use of the calculator. - Natural numbers, fractions and decimals to thousandths in everyday contexts: comparison and ordering.</p> <p>D.Algebraic sense.</p> <p>1. Patterns.</p> <p>- Strategies for identifying, representing (verbally or by means of tables, graphs and invented notations) and reasoned prediction of terms from regularities in a collection of numbers, figures or pictures.</p> <p>- Creation of recurring patterns from regularities or other patterns using numbers, figures or images.</p> <p>3.Relationships and functions.</p> <p>- Equality and inequality relations and use of the signs $<$ and $>$. Determination of unknown data (represented by a letter or symbol) in simple expressions related by these signs and the $=$ and \neq signs.</p> |

Extract from the Mathematics programme for the 6th year of Primary Education.



Extract from the Mathematics programme for the 6th year of Primary Education.

2.- Methodological and didactic principles

The methodological principles that will guide teaching practice are set out in Royal Decree 157/2022, of 1 March, which establishes the organisation and minimum teaching requirements for Primary Education, according to which the area must be approached in an experiential way, giving special relevance to manipulation, especially in the first levels, and progressively promoting the continuous use of digital resources, proposing learning situations to students that encourage reflection, reasoning, the establishment of connections, communication and representation.

In the same way, it is recommended to combine different teaching methodologies that favour inclusive mathematics and motivation to learn, and that also generate curiosity and the need for students to acquire the knowledge, skills and attitudes of the area.

Active methodologies are particularly appropriate in a competence-based approach, as they allow knowledge to be constructed and classroom activity to be energised through the exchange of ideas. Learning situations facilitate interdisciplinarity and encourage reflection, criticism, the development of hypotheses and research work.

With regard to Mathematics, the Royal Decree establishes that it should be approached in an experiential way, giving special relevance to manipulation, especially in the first levels, and progressively promoting the continuous use of digital resources, proposing learning situations to students that encourage reflection, reasoning, the establishment of connections, communication and representation. Similarly, it is recommended to combine different teaching methodologies that favour inclusive mathematics and motivation to learn, and that also generate curiosity and the need for students to acquire the knowledge, skills and attitudes of the area. Active methodologies are particularly appropriate in a competence-based approach, as they allow knowledge to be constructed and classroom activity to be energised through the exchange of ideas. Learning situations facilitate interdisciplinarity and encourage reflection, criticism, the development of hypotheses and research work.

3.- Transversal contents. British Values and protected characteristics

Extract from the Mathematics programme for the 6th year of Primary Education.

ACTIVITIES RELATED TO THE DEVELOPMENT OF THE BRITISH VALUES

- Democracy:

Carrying out democratic voting during mathematics classes to take different collective decisions.

-The rule of law

Classroom poster showing the rule of law

-Individual liberty:

- Encouragement of individual decision making, through the choice of different types of activities to be developed in the area.

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

-Respect for cultural differences and levels of intellectual and motor development that students may present during mathematics classes.

ACTIVITIES RELATED TO PROTECTED CHARACTERISTICS

Sex, race, religion or belief, disability, gender reassignment, pregnancy and maternity and disability.

- Respect for all people and non-discrimination on the basis of sex, race, religion or beliefs will be encouraged in the development of Mathematics classes.

- The theme of children's rights will be addressed.

4.- Evaluation

4.1. Assessment procedures and instruments

| WRITINGS | ORALS | OTHER |
|---|--|---|
| <ul style="list-style-type: none"> ● Pupil's various tasks carried out in daily classroom activity. ● Various student assessment activities (book, photocopiable worksheets, written test...). ● Group work. ● ICT activities: interactive. ● Notebook | <ul style="list-style-type: none"> ● Individual and collective questions. ● Dialogue. ● Oral presentation. ● Individual oral test. | <ul style="list-style-type: none"> ● Observation and assessment of the degree of participation of each student and the quality of their interventions. Order, cleanliness, quality. Compliance with standards. ● Attitude towards work and proposed tasks |

Extract from the Mathematics programme for the 6th year of Primary Education.

4.2. Qualification criteria

| PROCEDURE | ASSESSMENT TOOLS | PERCENTAGE RATING |
|---|--|-------------------|
| Observation | <ul style="list-style-type: none"> - Checklist - Headings | 25% |
| Productions | <ul style="list-style-type: none"> • Notebook Productions: <ul style="list-style-type: none"> · Technological · Other media | 40% |
| Experimentation (Specific tests) | <ul style="list-style-type: none"> • Written test • Oral test 30%. | 30% |
| <ul style="list-style-type: none"> • Percentage allocated to the Reading Plan in this area | | 5% |