



# Mathematics

# Policy



*Everyone who works with pupils should do what is in the best interests of the child."*

Article 3 United Nations Rights of the Child  
**May 2020**

### **Introduction:**

“Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history’s most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.” Jersey Curriculum 2014

At St Saviour’s we see Maths very much as a multi-discipline, cross curricular, interconnected subject which should encourage creativity. As much revolves around the discussion about Maths between talk partners as it does the completion of calculations. We want the pupils to see Mathematics as being relevant to their world and applicable to everyday life as well as being something that they will need as they move on through their school life and ultimately to the world of employment. To that end, a high-quality, inter-related and creative Maths experience should be one that develops the pupils’s ability to think mathematically and one which allows them to apply the tools to which they have been exposed in a variety of ways.

Following the introduction of the new Jersey Curriculum in 2014 the emphasis has been to ensure that all pupils:

- Become **FLUENT**
- **REASON** and **EXPLAIN** mathematically
- Can **SOLVE PROBLEMS**

This means that pupils need to be regularly exposed to opportunities involving increasingly complex problem solving which allows them to apply their Maths knowledge. In doing so they should be encouraged to develop an argument and line of enquiry which they can prove and justify using mathematical vocabulary. This includes the ability to break down problems, both routine and non-routine, into a series of steps.

### **Aims:**

We want to teach Maths in a way that:

- delivers Maths in line with Jersey Curriculum guidelines
- ensures the delivery of Maths is filled with cross curricular opportunities
- creates a lively, exciting and stimulating environment
- promotes the concept that acquiring Maths knowledge and skills provides the foundation for understanding the world around the pupils
- develops mental strategies
- encourages pupils to use mathematical vocabulary to reason and explain
- allows time for partner talk in order to stimulate and develop a curiosity for Maths
- challenges pupils to stretch themselves and take risks in their learning
- creates a sense of awe and wonder surrounding Maths
- ensures pupils in Key Stage 1 are secure in their understanding of number and number relationships
- provides pupils with the opportunity for low entry-high ceiling challenges

### **Approach**

The programmes of study set out within each domain in the Jersey Curriculum is used to ensure pupils get the learning experience that is required. Progression documents are also being developed and will be adopted and disseminated to teachers.

It is important that pupils are allowed to explore Maths and present their findings not only in a written form but also visually and verbally; to that end we have adopted the CPA approach: concrete, pictorial, abstract. This allows the pupils to experience the physical aspects of Maths before finding a way to present their findings and understandings in a visual form before relying on the abstract numbers.

### **Planning and Assessment:**

Year group curriculum maps provide a progression of skills in each section. Medium Term Planning shows opportunities to develop skills through other curriculum areas.

Teachers use their own judgement and formative assessment to ensure a flexible approach is adopted which recognises the pace of learning within the classroom. Weekly pre-assessment takes place in order to inform the planning for the following week.

Individual, paired and group work will be used across a series of lessons and pupils will be given the option of up to three dot learning opportunities and challenges/open-ended problem solving tasks to demonstrate their understanding.

Planning will demonstrate the various challenges available to pupils, together with AfL (Assessment for Learning) opportunities (speaking and listening and self/peer assessment) and teacher assessment.

Across a range of lessons pupils should be allowed to engage in mathematical discussion (talk partner or group work), investigations, problem solving, practical experiences and written methods, as well as allowing for time to demonstrate their understanding through 'Prove-it' tasks.

Assessments are informed by annotated plans and work in pupils' books. Termly, pupils will be assessed through the use of summative assessments (end of unit/half term tests)

Pupils will be provided with feedback either verbally or through written marking. When marking work teachers should adhere to the school's Marking Policy

### **Monitoring:**

Systematic monitoring of all aspects of the curriculum informs the subject leader and school improvement plan /school evaluation form. This is carried out through planning scrutiny, pupil feedback and monitoring examples of work.

There is an annual audit of maths teaching and learning throughout the school, supported by external colleagues. A report is written, actions planned and monitored – this is all shared with staff as part of the school improvement cycle

### **Early Years:**

Pupils will be provided with a wide range of mathematics learning experiences indoors, outdoors and through role play in both child-initiated and adult-directed activities.

### **Resources and Displays:**

Each classroom will be resourced with materials to support the delivery of maths; such items might include number lines, multiplication tables, 100 squares, 2D and 3D shapes, multilink cubes, dice and other smaller items. Larger materials such as scales, trundle wheels and measuring cylinders will be held centrally in the store cupboard in the Learning Zone.

Children should be encouraged to use whatever resources are available to them in the classroom and which they feel would be beneficial to help them when completing maths work.

Each classroom should have a display dedicated to maths; this could be in the form of a working wall, strategy board or problem solving area and pupil voice should be evident.