## **ESW Mathematics assessment rationale**

## Purpose of assessment:

Assessment in mathematics is intended to help children to learn more and remember more. It does this by:

- Making it easy to identify and close gaps and misconceptions in children's learning.
- Helping teachers to systematically adapt their planning and lessons to the needs of their students.
- Providing information that supports leaders in strategically adapting the curriculum and associated resourcing to improve student progress in mathematics.

## **Assessment strategies**

To achieve these objectives, our assessments are designed to support teachers in understanding how well students have learnt knowledge taught recently, knowledge taught in previous years/phases and the highest impact topics in the maths curriculum. The table below lists the different strategies used to assess in mathematics, what information is collected, how it is used and who uses it.

Strategy	Rationale
In class AFL	To provide instant feedback on current learning to student and
<ul> <li>Circulating</li> </ul>	teacher regarding the success of instruction to inform next steps
<ul> <li>Questioning</li> </ul>	in the lesson sequence.
- Mini whiteboards	
	This information is collected and used only by the teacher.
Sparx classroom	<ul> <li>Teacher monitors real time data for all students with regard to which questions they have answered, how many attempts they have had and if they have accessed help. This supports teachers to understand: <ul> <li>progress through lesson material to ensure all students are engaged and working hard.</li> <li>student success on questions to identify common issues and give feedback.</li> <li>student use of support videos to identify instruction needs and judge confidence.</li> </ul> </li> </ul>
	Team leaders will occasionally use this data for monitoring purposes.
Sparx home learning data	Sparx home learning contains a mixture of teacher set topics and revision/consolidation of past content. Insights data is used by the teacher to inform planning.
Low stakes quizzes	Teachers use low stakes quizzes to assess the success of recent and past instruction, inform planning and provide (individual or whole class) feedback to students and their parents.  Assessments:  Teacher adapted – to focus on the needs of the class.  Framed by low stakes language ('I want to find out how successful my teaching has been' etc.)  Granular – to ensure teachers can diagnose specific
	<ul> <li>misconceptions or problems.</li> <li>Short – to allow fast marking and feedback</li> <li>Done in exam conditions</li> </ul>

End of cycle assessments Y7-9	Students complete an assessment at the end of each cycle. These assessments contain:
	- topics from the current cycle (approx. 60%)
	- past learning from the wider maths curriculum with a focus
	on high impact knowledge (listed below) (approx. 40%)
	- calculator and non-calculator sections (50 min each) - a mixture of question difficulties
	<ul> <li>questions designed to support teachers in directing repair and intervention.</li> </ul>
	and intervention.
	Assessment preparation is standardised through the following
	strategies:
	1) The use of pre-test material. This material is designed to
	give revision practice of key topic areas (both recent and
	historical) that is related to but broader than that in the
	actual assessment. Teachers are encouraged to use this
	material to diagnose gaps and misconceptions so that
	they can be corrected before the actual assessment.
	2) Preparation of revision notes. Students are taught how
	to summarise their learning in the form of revision
	notes. They are allowed to use these in some of the
	assessments.
	Assessment conditions are standardised through the following:
	1) 1 hour per paper.
	2) Students are allowed to take a single side of A4
	containing revision notes into some assessments as
	indicated on the scheme.
	Question level data is collected for each student on Cloud
	School.
	A question level data analysis tool is provided to help teachers
	supply students with feedback and inform planning.
	School data is collated and used by department leadership to
	support intervention planning for classes, teachers and CPD
	planning.
	Summary data is used to inform strategic curriculum
	development and future assessment needs.
End of cycle assessments Y10	Y10 assessments follow the same structure as Y7-9 but are based
	on GCSE papers.
End of cycle assessments Y11	Past GCSE papers are used.