

LONG TERM PLAN FOR MATHEMATICS

Curriculum Intent

Our children have a broad range of needs and in order to effectively meet these needs, our curriculum has been designed based on three different pathways:

- Formal Pathway
- Semi-Formal Pathway
- Pre-Formal Pathway

The individual needs of learners are met through personalised approaches, however, the sequential development of skills is a core principle of the curriculum approach for each group, recognising the hierarchical development of concepts and skills necessary before learners can progress to higher level skills.

The organisation of children into classes is through a mixture of Key Stage, ability and sometimes other factors such as previous educational history. As an all age school, pupil progress through classes and detailed transitional arrangements can be discussed informally between teachers to support the progress of learners.

Formal Curriculum Pathway – For pupils with Moderate Learning Difficulties (MLD):

Planning, learning and assessment for these pupils is guided by the National Curriculum. It is designed to ensure that all learners become fluent in the fundamentals of Mathematics and develop conceptual understanding, are able to reason mathematically and explain their thinking using mathematical language. They should also be able to solve problems by applying their mathematical skills to relevant real life situations and persevere in seeking solutions, as well as following a sequential curriculum that builds on past learning and promoting continuity and progression.

Semi-Formal Curriculum Pathway – For pupils with Severe Learning Difficulties (SLD):

The approach used throughout the Semi-Formal curriculum is to develop mathematical thinking through a themed approach with focused learning opportunities that introduce content appropriate to the individual's cognitive processing capabilities.

The Semi-Formal Curriculum promotes Mathematics through explorative learning which provides opportunities for learners to encounter the world around them. Within their play younger pupils may reach, hold, explore and encounter sensory items and stimuli in order to gain independence and enable opportunities for communication and cognitive development. Their mathematical understanding is also developed through stories, songs and games. Older pupils are provided with similar but age appropriate opportunities. They will be given time to apply the concepts and skills they have developed previously in day to day situations such as telling the time, using money, following sequences, weighing and measuring and to practise their skills in real life contexts both within and outside of school.

Pre-Formal Curriculum Pathway – For pupils with Profound and Multiple Learning Difficulties (PMLD):

In classes for pupils with PMLD, pupils develop their thinking skills through a holistic approach to learning and consequently Mathematics is not taught as a discrete curriculum option but is associated with the development of wider thinking skills.

Curriculum Implementation

Formal Curriculum Pathway - For pupils with MLD:

Pupils with MLD in Key Stages 1-3 have between 3 and 5 timetabled sessions of Mathematics each week. Pupils with MLD in Key Stages 4 and P16 have between 2 and 3 timetabled sessions of Mathematics each week.

Semi-Formal Curriculum Pathway - For pupils with SLD:

Pupils in Key Stages 1-3 have between 3 and 5 timetabled sessions of Mathematics each week. Pupils Key Stages 4 and P16 have between 2 and 3 timetabled sessions of Mathematics each week. Some pupils with SLD in Key Stages 4 and P16 also have between 2 timetabled sessions of Life and Learning skills each week. These sessions focus upon the use of mathematical skills and concepts in real-life and practical situations.

For pupils on the Pre-Formal Curriculum Pathway - For pupils with PMLD:

Pupils have up to 7 timetabled sessions of Thinking Skills each week. This is the area of learning that most specifically relates to the development of early learning and mathematical skills.

For pupils in Early Years:

Pupils have 2 timetabled sessions of mathematical development. Mathematics is also developed in a cross-curricular way through the implementation of a cycle of themes, which are explained in more detail in the Early Years Policy (Policy Number 27). Pupils learn through playing, exploring and actively learning in a stimulating, enabling environment.

Formal Curriculum and the Semi-Formal Curriculum Pathway - For pupils with MLD and SLD:

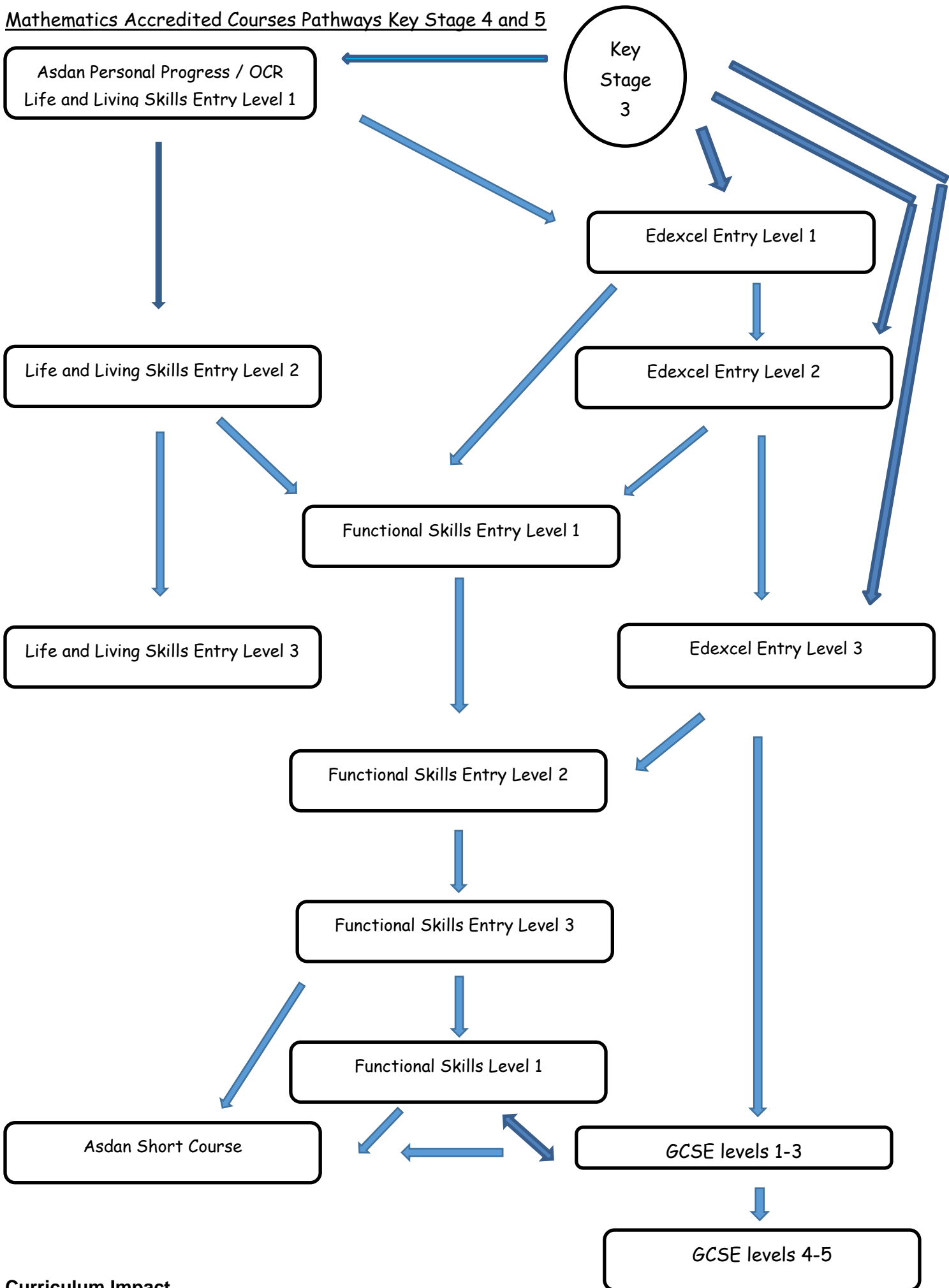
In all classes for pupils with Moderate and Severe Learning Difficulties teaching takes into account personal learning styles whilst also empowering pupils to draw on a wide range of calculation strategies, explaining methods and reasoning and establishing a secure foundation in mental calculation and the recall of number facts before standard written methods are introduced.

Pupils are enabled to extend their reasoning, problem solving and investigational skills and assisted to make predictions, judge whether their answers are reasonable and have strategies to check.

Pupils are encouraged to develop life skills for living, employment and recreation. This includes, but not exclusively, money, time and measure.

	Formal Curriculum (for pupils with MLD)	Semi – Formal Curriculum (for pupils with SLD)	Pre – Formal Curriculum (for pupils with PMLD)
Early Years	Development Matters in the Early Years Foundation Stage	Development Matters in the Early Years Foundation Stage	Development Matters in the Early Years Foundation Stage
KS1	Hamilton Mathematics YR	Development Matters in the Early Years Foundation Stage	Development Matters in the Early Years Foundation Stage or Barrs Court Curriculum
KS2	Hamilton Mathematics Y1 -- Y2	Hamilton Mathematics YR	Barrs Court Curriculum
KS3	Hamilton Mathematics Y2 - Y4	Hamilton Mathematics Y1 or Equals	Barrs Court Curriculum
KS4	Accredited courses – see pathways below (Materials from Hamilton Y4-6 may be used)	Equals Accredited courses – see pathways below	Barrs Court Curriculum
P16	Accredited courses – see pathways below (Materials from Hamilton Y4-6 may be used)	Equals Accredited courses – see pathways below	Barrs Court Curriculum

Mathematics Accredited Courses Pathways Key Stage 4 and 5



Teachers maintain a record of progress in pupils' Mathematics using SOLAR . Summative assessment for pupils with MLD or SLD takes place using either Early Years Foundation Stage Development Matters, P levels or Accredited Course Specifications which are downloaded onto SOLAR.

Pupils with PMLD are assessed using individual targets that are set to link closely to their band on Routes for Learning. Progress is recorded using MAPP (Mapping and Assessment of Pupil Progress) and uploaded on to SOLAR. This is updated at least termly.

All data from SOLAR is then entered termly on to a whole school spreadsheet. From there it can be seen how much progress pupils are making and interventions can be put into place if necessary.

The progress of pupils within Mathematics is also monitored through:

- Pupils' responses to the tasks set in planned activities through questioning and feedback
- Pupil observation as they interact in their play, everyday activities and planned tasks
- Staff discussion one to one, in groups or in larger meetings
- Analysis of Medium Term Plans by the subject leads and Headteacher
- Moderation of pupils' work during Mathematics moderation meetings to compare for standardisation particularly between key stages
- Lesson observations and learning walks by the subject leads and Headteacher
- Work scrutiny including work folders or video evidence