Mathematics curriculum.

Intent

At Astbury school, our maths curriculum provides a whole school consistent approach to the teaching of maths. We strive to provide the children with the skills, knowledge and understanding of mathematics so each child can access their age related curriculum, preparing them for their next stage of education and giving them a foundation to flourish.

Through the teaching of mathematics, we aim:

* to develop confident mathematicians who are not scared by number but are excited by the challenge of maths
* to develop mathematicians who easily make connections between their maths and who are fluent and show automaticity in the recall of vital number facts.
* for our children to have a good understanding of the vocabulary associated with maths who are able to confidently reason and explain their thinking.
* for children to solve problems by applying their mathematics to a variety of routine and non-routine problems.

Implementation

At Astbury, we use Power Maths as the structure for our planning and teaching across school. This is supplemented with the use of other resources such as White Rose Maths and NCETM materials. This allows teachers to follow a teaching for Mastery approach, developing a deep and lasting understanding of mathematical procedures and structures.

When introduced to a new concept, pupils have opportunities to build competency by being encouraged to physically and visually represent their mathematics. High quality resources are available in all lessons to demonstrate and visualise abstract ideas, alongside numbers and symbols.

Although our class structure is mixed age, our delivery of mathematics is in year groups. This means all children receive their age appropriate curriculum ensuring building blocks are in place and mastered, before moving on to new content.

During our Maths lessons, you will see:

* Collaboration and opportunity for partner talk
* Consistency in routines and the delivery of Maths.
* Opportunities for children to work independently, applying their learning.
* Vocabulary and correct mathematical terminology used in all year groups.
* Working walls may be used to model and scaffold learning.
* Concrete manipulatives are accessible to children to select to support their Mathematical Understanding.

We know that confidence and fluency in times tables opens up all areas of mathematics so we make use of a fun and challenging online programme called Times Tables Rock Stars.

Impact

Formative assessment strategies are used throughout daily maths lessons, ensuring that all children grasp the necessary understanding of concepts. At the end of each unit of work, the children reflect upon their learning and carry out End of Unit Assessments from White Rose Maths. A mistake analysis is carried out to identify and patterns in misconceptions and these then feed into planning.

Through this we ensure:

* the needs of all learners are met with high quality first wave teaching, supported by targeted, proven interventions where appropriate.
* there is an enjoyment of the maths curriculum, promoting achievement, confidence, fluency and basic skills.
* children can confidently talk about their mathematics knowledge and understanding, using the correct mathematical vocabulary.
* all children understand that mistakes are ok and lead to learning.
* children have a readiness for the next phase of learning and an ability to apply their learning to a wide range of problem solving tasks.
* learned skills can be applied in a range of contexts including reasoning.