

## Children's Maths Lessons at Greenacre's Farm



Visits to Greenacre's Farm play an important role in the children's education in years 3/4, where visits are organised throughout the academic year. They are designed to be cross-curricular and include both core and foundation subjects.

Mark Lea, the farmer and key leader during the visits, provides the children with opportunities that they would not usually have in school. Children are able to apply and extend their knowledge as well as gain new skills through practical activities.

There is a standard feature to every visit where children monitor and gather statistics relating to animals and crops. This may include the weight gained by new-born lambs from the previous visit to the number of broad beans found on plants grown by the children.

The children have undertaken many adventurous tasks during the visits. These include: building a working Shaduf and making mud bricks during their Ancient Egypt topic; learning about seed dispersal, planting new hedgerows and making solar panels within science experiments and comparing different farm and school environments within the geography curriculum.

One of the major opportunities the farm visits present, is the chance for children to experience, first-hand, the real world application of mathematical concepts. For example, one of the year's visits involved the children designing and taking part in the build of a new barn for the calves, yearlings and adult cows at the farm.

Initially, the children were shown the space which was available for the new barn and were asked for their help in measuring and calculating the space needed for the animals. They were then asked to make choices as to the appropriate material for the barn's construction.

The children were enthusiastic and welcomed the challenge. They used their knowledge and experience from previous visits, along with a little guidance to select the appropriate material for the walls, floor and roof of the barn.

Back at school they learnt how to accurately measure linear distances using equipment which they believed to be suitable for the job. They were then taught the formula of calculating area and practiced and secured these skills on a smaller scale.

During the next visit to the farm the children worked in groups measuring the width and length of the space available and then applied their knowledge of area to calculate the final space for the barn.

Finally, the children were given the task of finding out how many calves, yearlings and adult cows could be housed in the new barn at any one time according to the space each one needed.

During this particular visit the group of children were lucky enough to witness a calf being born, a memory which they are all very fond of!

The final visit in the year allowed the children to see the barn near completion with their ideas in place. This enabled them to check the measurements and make any amendments to the number of animals which could be housed in the barn at any one time.

This is just one example amongst many of the way in which the links with Greenacre's Farm enriches the academic learning of the children through deeper, more secure understanding gained through practical application of ideas. Equally as valuable, they have been given an opportunity for a better insight into, and appreciation of, an important part of the world around them.

" Since we began teaching maths on the farm the children's enjoyment of maths has improved and a recent straw poll suggests that more children now **believe** that they are good at maths than before we started the project. There is a growing self-belief that maths is not a "difficult" subject and children are attacking problem-solving skills

with more confidence" Adrian Marsh St Andrews CE Primary School Shifnal  
Shropshire.