

KS2 - MATHS (PRE-VISIT)



Year 3 & 4 Pupils should be taught to:

- measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- add and subtract amounts of money to give change, using both £ and p in practical contexts
- estimate, compare and calculate different measures, including money in pounds and pence (non-statutory)
- pupils continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed units (for example, 1 kg and 200 g) and simple equivalents of mixed units (for example, 5 m = 500 cm).
- The comparison of measures includes simple scaling by integers (for example, a given quantity or measure is twice as long or five times as high) and this connects to multiplication.

Year 5 & 6 Pupils should be taught to:

- convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
- use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.
- solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
- use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places (non-statutory)
- Pupils use all four operations in problems involving time and money, including conversions (for example, days to weeks, expressing the answer as weeks and days).

Learning Objectives (children will be taught to):

- use their understanding of different units of measure including length, volume, capacity and money to solve real-life mathematical problems
- understand and use scaling
- convert between standard units, converting measurements of length, mass and volume using decimal notation to up to three decimal places.

Learning Outcomes (children will be able to):

- use scaling to solve word problems
- link these results to a real situation using Bransby Horses.

Lesson Plan Resources Activity Resources Starter • Using individual whiteboards ask the children to solve several quick-fire multiplying and dividing by 10, 100 and 1000, including numbers with up to 3 decimal places. Whiteboards

CAN YOU Afford a Horse?





 Teaching Share the story of Peter Hunt who was the founder of Bransby Horses. He rescued his first horse in 1947 from a bomb site in London. Sally, a four year old mare came to Bransby with him in 1967 where she received a lifetime of care and love. Peter Hunt continued rescuing horses, ponies, donkeys and mules and established the charity now known as Bransby Horses. Use 'Sally' as the example for working out some costings and measurements involved in the daily care of an average sized horse. Put the children into 6 groups each focused on one area of a horse's requirements per day. Food - price of food for Sally for one week = £20.00 Food - weight of food for Sally for one week = 80 kg Drink - volume of water Sally would drink in one week = 315 litres Medicine and veterinary - average cost of medicines and vet's bills for one week = £10.00 Poo - average weight of poo deposited by Sally per week = 114.24 kg Working hours - Number of hours spent working for Sally per week = 7 hours per week - this is for an experienced yard person. For a child or somebody less experienced this could easily be at least 21 hours. 	
 Short Activity Provide the children in each group the basic data for their specific area of investigation and ask them to work out the relevant amounts for one month (being 4 weeks) and one year (52 weeks). 	Resource 1 (Data)
 Teaching Children come back together and share their results. Ask the children to extend this investigation by scaling their results up, thinking about different lengths of time and numbers of horses 1 year/10 years/100 years 1 horse/10 horses/100 horses/1000 horses. Children doing extension tasks could look at the needs of a Shetland pony (using half or a third of the amounts given) and a Shire horse (needing 1.5 times the amounts given). 	Resource 2 (worksheet for recording data)
 Short Activity Children to carry out this task in their groups and record all of their data, going on to the extension tasks if they have the time and the ability. 	
 Plenary Feedback their results with the rest of the class. Additional Task On their visit to Bransby the children will have the opportunity to see, measure and weigh some of these amounts. They will also find out the current number of horses at Bransby Horses, so they can work out exact data upon their return. 	



Bransby Horses, Bransby, Lincoln, LN1 2PH | www.bransbyhorses.co.uk | mail@bransbyhorses.co.uk | 01427 788464 Bransby Horses - Rescue and Welfare @ @BransbyHorses BransbyHorses

Bransby Horses is a Registered Charity No: 1075601. Company Limited by Guarantee Registered in England and Wales No: 3711676.