

## As tall as...

The exercise will encourage the children to work with classmates they may not have worked with before and a mascot for the group will promote teamwork. The children will learn to estimate distances, develop reasoning and rationale skills along with a better understanding of evolution.



### KS2 Numeracy Lesson Plan



1 hour

#### Equipment

- 8 sheets of A4 paper (you may want more for the children's heights)
- A blank section of wall
- Coloured pens and pencils for each group
- Blu-tac
- Tape measure

#### Key learning outcomes

- Measuring shapes and heights
- Mathematical skills
- Averages
- Estimating distances
- Team working skills
- Knowledge of common species
- Evaluative and critical thinking

Time	Activity
10 mins	<ul style="list-style-type: none"> <li>■ Divide the class into 8 groups. You might want to go round the room assigning each pupil to a number to mix up the groups.</li> <li>■ Write the following animals on the board: <b>red deer, cow, heron, sheep, boar, fox, rabbit, mouse.</b></li> <li>■ Each group will pick one of these animals to draw on 1 sheet of paper but all animals must be used.</li> <li>■ This animal is now their group mascot. Can they think of a name for it?</li> </ul>
10 mins	<ul style="list-style-type: none"> <li>■ When each group has drawn and named their animal they will take it in turns to stick their drawing on the wall at the height they think their animal is (<b>you may need to help with the larger animals</b>)</li> <li>■ Question their choices, ask 'why?' and make them think critically about their decision. Encourage logical thinking. (<b>e.g. X is taller than Y so must go above it</b>).</li> <li>■ Do not allow any input from other groups at this point.</li> </ul>
5 mins	<ul style="list-style-type: none"> <li>■ When each group has put their animal on the wall, ask if everyone is happy with the scale.</li> <li>■ Lead a discussion allowing other students to say if they think any heights will be different to what has been suggested.</li> </ul>
10 mins	<ul style="list-style-type: none"> <li>■ Using the tape measure, adjust the animals to the following heights: <b>red deer – 1.5m, cow – 1.2m, heron – 90cm, sheep – 65cm, boar – 50cm, fox – 35cm, rabbit – 20cm, mouse – 5cm</b></li> <li>■ With the class, suggest why animals are different heights. For example, a stag's antlers are for rutting, so will make it taller; and that a mouse and rabbit are small to enable them access to where it lives: a burrow. A heron has long legs to lift it high to peer into the water and a long slender neck that can dart out and catch a fish. A boar is tall enough to crash through the underbrush in a forest, but is still close to the ground to forage for food.</li> </ul>
25 mins	<ul style="list-style-type: none"> <li>■ Measure the height of the children against your scale. Mark their height on the paper and let them know which animal they are as tall as.</li> <li>■ Ask each child to write down the heights of each member of their group.</li> <li>■ Then ask the children to work out the average height of their group (<b>the sum of each value divided by the total number of values</b>).</li> </ul>



#### Homework

Ask the children to pick another UK animal (**that hasn't been used today**) and to write possible reasons for its height.