

# Rounding and Estimating

Maths

Year 3

Lesson 3 of 5

Learning Objective	Resources	
To be able to make estimates of numbers.	Slides Worksheet 3A/3B/3C/3D Cubes, counters and paperclips	
Teaching Input		
<ul style="list-style-type: none"> <li>What does the word 'estimate' mean? Children to think, pair, share their ideas then go through the explanation on the slides.</li> <li>Show children the circles quickly on the slides then move onto the next slide so they don't have time to count! How many circles do you think there were? Children to write an estimate on their whiteboards then check on the slides. Repeat this with other shapes and amounts.</li> <li>Hold a group of pencils in your hand and ask the children to estimate how many you are holding. They should write their estimate on their whiteboards. Ask a child to count the pencils and then ask the children to show their estimates. Check for any children who have estimates that are wildly wrong!</li> <li>Repeat this for some or all of the following: a handful of counters; a tray of cubes; a tray of rulers; a handful of cubes.</li> </ul>		
Main Activity		
<u>Lower ability:</u>  Provide children with a pile of cubes in pairs or small groups. Challenge children to take a handful of cubes each, then drop them onto the table. How many cubes do you estimate there are? Children to each give an estimate, making sure they don't count! They then count the cubes together. Whose estimate was closest? The child with the closest estimate wins a point. The winner can be the first person to get e.g. 10 points. They can record their estimates and points on worksheet 3A.	<u>Middle ability:</u>  Provide children with a pile of counters in pairs or small groups. Challenge children to take a handful of counters each, then drop them onto the table. How many counters do you estimate there are? Children to each give an estimate, making sure they don't count! They then count the counters together. Whose estimate was closest? The child with the closest estimate wins a point. The winner can be the first person to get e.g. 10 points. They can record their estimates and points on worksheet 3B.	<u>Higher ability:</u>  Provide children with a pile of paperclips in pairs or small groups. Challenge children to take a handful of paperclips each, then drop them onto the table. How many paperclips do you estimate there are? Children to each give an estimate, making sure they don't count! They then count the paperclips together. Whose estimate was closest? The child with the closest estimate wins a point. The winner can be the first person to get e.g. 10 points. They can record their estimates and points on worksheet 3C.
Fancy something different...?		
<ul style="list-style-type: none"> <li>Provide children with worksheet 3D which has different lengths of line. Ask children to estimate how many finger widths each line is, then check. To differentiate this, the page could be enlarged to A3 for higher-ability children.</li> <li>This activity can be varied by e.g. asking children to lay down strips of masking tape on the floor and estimating how many footsteps long each is, or dropping bean bags in two locations and estimating the distance between them.</li> </ul>		
Plenary	Assessment Questions	
Show the children the slide that has a picture of Salt Lake Stadium in India. Tell them that this is the biggest football stadium in the world. How many people do you think it holds? Show them the slide with a picture of Wembley stadium which is the largest in the UK. How many do you think it holds? If you have a football ground near you, find out its capacity and ask the children to estimate it.	<ul style="list-style-type: none"> <li>Can children make reasonable estimates for small numbers of objects?</li> <li>Can children make reasonable estimates for larger numbers of objects?</li> <li>Can children check their estimates accurately and check how close they were?</li> </ul>	