

# Odd and Even Numbers

**Use with:** Math by Myself or Math with Someone

<b>Concept</b>	To determine whether a group of objects has an odd or even number of members.
<b>Materials Needed</b>	<p>Each student will need:</p> <ul style="list-style-type: none"> <li>• at least 20 cubes</li> <li>• a white board</li> <li>• dry erase marker</li> <li>• a basket of numbers to choose from (will differ depending on the ability of the student)</li> </ul>
<b>Directions</b>	<p>Each student will practice determining whether a number is odd or even.</p> <ol style="list-style-type: none"> <li>1. The student will draw a number. (Ex. '12')</li> <li>2. The student will count out the number of cubes. (Ex. 12 cubes)</li> <li>3. The student will match each cube with a 'partner cube' to determine whether all cubes can be split up equally. (Ex. The student would end up with 6 cubes on one side, each one having a partner cube to equal 12.)</li> <li>4. Students would be able to determine if the number is even or odd, based on whether the cubes each had a 'partner' and could be divided equally.</li> <li>5. Students would draw the cubes on their white board, showing how each group is equally matched or not, thus being even or odd.</li> <li>6. Students will continue this same process with the other numbers drawn from the pile.</li> </ol>
<b>Differentiate</b>	<p>To differentiate instruction for students struggling with odd and even numbers, the teacher could partner students up and make this a "Math With Someone" activity. Therefore, students would have a peer to 'check' their answers.</p> <p>Teachers could also limit the numbers that are in the pile. For example, the highest number to work with could be '10'.</p> <p>Struggling students could also use a blank connecting cube workmat to help them line up cubes.  <a href="http://www.teacherspayteachers.com/Product/Patterning-Work-Mat-Freebie-853967">http://www.teacherspayteachers.com/Product/Patterning-Work-Mat-Freebie-853967</a></p> <p>*To differentiate instruction for advanced students, the teacher can give students a greater number of cubes and higher numbers to work with.</p>