



Activity—Odd and even numbers

Write a target number, 2 through 10, on the board. Students work in groups to find numbers they can add or subtract to make the target number selected. Younger students will use two numbers, older students may use three numbers.

Example: If 6 is the number chosen, students might find

$$3 + 2 + 1$$

$$10 - 1 - 3$$

$$5 + 5 - 4$$

$$8 - 4 + 2$$

Have students count the number of odd/even numbers in each number-sentence. Using this data make a chart.

<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	odd <input type="checkbox"/>	even
<input type="checkbox"/> 3 <input type="checkbox"/> + <input type="checkbox"/> 2 <input type="checkbox"/> + <input type="checkbox"/> 1 <input type="checkbox"/>	2 <input type="checkbox"/>	1
<input type="checkbox"/> 10 <input type="checkbox"/> - <input type="checkbox"/> 1 <input type="checkbox"/> - <input type="checkbox"/> 3 <input type="checkbox"/>	2 <input type="checkbox"/>	1
<input type="checkbox"/> 5 <input type="checkbox"/> + <input type="checkbox"/> 5 <input type="checkbox"/> - <input type="checkbox"/> 4 <input type="checkbox"/>	2 <input type="checkbox"/>	1
<input type="checkbox"/> 8 <input type="checkbox"/> - <input type="checkbox"/> 4 <input type="checkbox"/> + <input type="checkbox"/> 2 <input type="checkbox"/>	0 <input type="checkbox"/>	3

From this chart, have students discuss what they discovered and predict what would happen if a different target number was chosen. This activity can be done as a whole-class activity or as a group-discovery lesson.

Using this information about odd and even numbers, students can sometimes eliminate one wheel on a primer 24 game card. Determine which wheel to eliminate by checking the quantity of even numbers. For example, when using only addition and subtraction, two even numbers and one odd number can never make an even target number.