Let's explore some strategies we can use to round numbers to a specific place value (hundreds, tens, ones, tenths, etc.).

Example: Round 142.6 to the nearest ten.

- We start by modeling the number 142.6 with a place value chart. The tens place is highlighted because we need to round to the nearest ten.
- The number in the next place down is sometimes called the boss number. Here, it is a 2 in the ones place.

<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
<th>Tenths</th>
<th>Hundredths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>2</td>
<td>.</td>
<td>6</td>
</tr>
</tbody>
</table>

- Rounding to the nearest ten means we have to decide whether 142.6 is closer to 140 (round down) or 150 (round up). Think about counting by whatever place value you have to round to. In this example, count by tens: 130, 140, 150, 160, and so on.
- How do you decide whether to round down to 140 or up to 150? Look at the boss number!
- This rhyme can help with the next step:
  
  4 or less, let it rest.
  5 or more, make it soar!

- The boss number, 2, is “4 or less,” so we let the 4 in the tens place rest. In other words, we round down to 140.

- Another strategy we can use is a number line. We can make the low end the round-down number, 140, and the high end the round-up number, 150.
- We also mark the number right in the middle of these two: 145. (Remember: 5 or more, make it soar!)
- 142 is to the left of 145 and closer to 140 than 150, so it makes sense to round down to 140.
Let’s look at our example again, the number 142.6, but this time, we will round to the nearest one and use a vertical number line.

In our place value chart, the ones place is highlighted this time, and the boss number is in the tenths place because that is one place down from the ones.

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We have to decide whether 142.6 is closer to 142 (round down) or 143 (round up). You can think about counting by whatever place value you have to round to. In this example, count by ones: 140, 141, 142, 143, and so on.

How do you decide whether to round down to 142 or up to 143? Look the boss number and use our rhyme:

4 or less, let it rest.
5 or more, make it soar!

The boss number 6 is “5 or more,” so we let the 2 soar. In other words, we round up to 143.

On Page 1, we used a horizontal number line. Sometimes it’s helpful to use a vertical number line instead. The idea is the same, but the number we might round up to is on top, and the number we might round down to is on the bottom.

◊ 142 is the round-down number at the bottom. 143 is the round-up number at the top.
◊ The lines going across the vertical line show that we are counting up by tenths.
◊ The green dot shows that 142.6 is in the top part of the number line because it is at 142.5 or higher.
◊ Therefore, it makes sense that we round up to 143.

For More on This Topic: https://www.youtube.com/watch?v=ZbBmEKFL9K0

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