

# Number Sense in Early Elementary Math





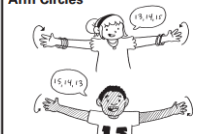

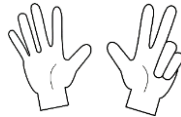
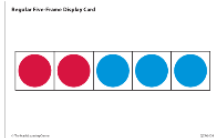

NCTM Nashville



Do First: What is 1 rule some elementary school teachers teach their students to help with the current grade level content, but “expires”?

What does it mean for a student to have number sense?

# Strategies to Try

Strategy	How?	When?
Action Counting (Nimble with Numbers)	<p><b>Action Counting</b> </p>  <div> <div> <p><b>Front and Back Clap</b></p>  <p>Forward: Clap hands in front of body. Backward: Clap hands behind body.</p> </div> <div> <p><b>Cross Stretch</b></p>  <p>Forward: Reach high, alternating arms. Backward: Reach low, alternating arms.</p> </div> <div> <p><b>Arm Circles</b></p>  <p>Forward: Circle arms in forward direction. Backward: Circle arms in backward direction.</p> </div> <div> <p><b>March Tall, March Low</b></p>  <p>Forward: March in place, standing tall. Backward: March in place, squatting low.</p> </div> </div>	
Partner Number Building	<ul style="list-style-type: none"> <li>Walk around while the music plays</li> <li>When it stops, find a partner</li> <li>Goal is to make the target number in as many ways as possible</li> <li>Example for Target 10: I hold up 5 fingers and say "5". My partner holds up 5 fingers and says "5 and 5 is 10."</li> </ul> 	
10 Frames: Flash Attack	<p>Flash a dot card. Students hold up either fingers or build with cubes.</p> <p>Flash the card again for kids to confirm.</p> <div>   </div>	

Guess my Number	<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr><tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr><tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr><tr><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td></tr><tr><td>41</td><td>42</td><td>43</td><td>44</td><td>45</td><td>46</td><td>47</td><td>48</td><td>49</td><td>50</td></tr></table> <p>Students ask questions and record on the 50's chart until the number is guessed.</p>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
1	2	3	4	5	6	7	8	9	10																																											
11	12	13	14	15	16	17	18	19	20																																											
21	22	23	24	25	26	27	28	29	30																																											
31	32	33	34	35	36	37	38	39	40																																											
41	42	43	44	45	46	47	48	49	50																																											
Cube Trains	<table><tr><td><div><div></div><div></div><div></div><div></div><div></div></div></td><td><div><div></div><div></div><div></div><div></div><div></div></div></td></tr><tr><td><div><div></div><div></div><div></div><div></div><div></div></div></td><td><div><div></div><div></div><div></div><div></div><div></div></div></td></tr><tr><td><div><div></div><div></div><div></div><div></div><div></div></div></td><td><div><div></div><div></div><div></div><div></div><div></div></div></td></tr><tr><td><div><div></div><div></div><div></div><div></div><div></div></div></td><td><div><div></div><div></div><div></div><div></div><div></div></div></td></tr><tr><td><div><div></div><div></div><div></div><div></div><div></div></div></td><td><div><div></div><div></div><div></div><div></div><div></div></div></td></tr><tr><td><div><div></div><div></div><div></div><div></div><div></div></div></td><td><div><div></div><div></div><div></div><div></div><div></div></div></td></tr><tr><td><div><div></div><div></div><div></div><div></div><div></div></div></td><td><div><div></div><div></div><div></div><div></div><div></div></div></td></tr></table> <p>Students build trains equivalent to 2 different numbers (using 2 or 3 colors). Class writes the addition sentences and uses the cards to explore equivalence.</p>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>																																					
<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>																																																			
<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>																																																			
<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>																																																			
<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>																																																			
<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>																																																			
<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>																																																			
<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>																																																			
Build a Number Line	<table><tr><td>0</td><td>10</td><td>20</td></tr></table> <p>A string is posted on the board and students are given number cards to discuss and place on the number line.</p>	0	10	20																																																
0	10	20																																																		

Amanda Patterson  
 KIPP Austin Public Schools  
[apatterson@kipppaustin.org](mailto:apatterson@kipppaustin.org)