

BUILD A DECIMAL NUMBER

Level	2 (Age group 8 – 10)
Resources Required	Digit Cards (as shown under the Images or Illustrations section) Pencils Paper
Alternate Options for the Resources	Students groups can make small digit cards by: <ol style="list-style-type: none"> 1. Cutting 20 pieces of paper to the size of their palm 2. On 10 of these cards, write a unique number from 0-9 3. Repeat this for one other set of 10 4. Each team should have 20 cards each
Strand Covered	Numbers and Operations
Targeted Skills	Place values for decimals
Developed by	Math Wire
Time Required	45 minutes total 30 minutes play time 15 minutes to make cards
Previous Learning Required	Numbers from 0-1,000 Decimal numbers (hundredths and tenths place value)
Support Required	Medium support

Rules of the Game:

Goal	The team with the most points when the game ends, wins
Rules	Once the adult calls out the condition, the groups are allowed to discuss before arranging their numbers Students can only draw the number of cards required for that number. For example, if a number goes into the thousands, only 4 cards can be drawn from the pile. Students are not allowed to swap out cards they drew from the pile Each prompt is allocated one point, so the winner of that round can get a maximum of one point
Steps	Step 1: Place the digit notecards face down in a shuffled pile in front of each group Step 2: The adult calls out a prompt such as “build the greatest number you can with 4 digits and write it in words” Step 3: The students then randomly draw 4 cards from the pile in front of them and make the largest 4-digit number possible and write it out in words on paper

	<p>Step 4: The team with the largest number and a correctly written number in words, gets one point</p> <p>Step 5: The game repeats with the adult calling out different prompts or the teams taking turns to create and call out different prompts.</p> <p>Sample prompts include:</p> <ul style="list-style-type: none"> • Shuffle the cards and pick 3 digit cards and arrange them to make the largest number • Shuffle the cards and pick 2 digit cards and arrange them to make the largest number 																				
<p>Images or Illustrations</p>	<table border="1" data-bbox="488 763 1401 1442"> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> </tr> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> </tr> </table>	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
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<p>Variations of the Game</p>	<ol style="list-style-type: none"> 1. This game can be played individually instead of in teams 2. This can be played with low support (without an adult) by creating question cards that need to be drawn by the players 3. The game can be played with every player or team having all 22 cards with them instead of only drawing the necessary cards 																				
<p>Enrichment</p>	<p>This game can be used for any target topic. For example, instead of place values, it can be targeted for angles, time, measurements, number operations or probability.</p>																				
<p>Simplification</p>	<p>The players are allowed to swap cards one time if they are not satisfied with the first set of cards drawn</p>																				