## Place Value Cards

Some ways to use:
Representation practice: go from cards to materials or vice versa. Can make a game if you take turns turning over a tens and a ones place, continue until you can not make your number from the remaining base ten materials. (Use multiples of smaller tens and ones possibilities.)

Race to 100: Draw cards from stacks of tens and one's place cards, add that many base ten materials to your stack. First to 100 (or 200 or 1000) wins. Needed: many ones place cards, multiples of 10 and 20. (Higher values for racing higher.)

More: Each player has a deck of each place value being used. Players turn over one of each place being used. For example: player A turns over 100, 70 and 3, player B turns over 300, 10 and 1. Player B takes the cards. Variation: play so that the winner has the smaller number.

Board game: use cards to determine how far a player moves on a game board or on a hundred's board. (Typically uses smaller ten's place cards.)

Multidigit addition/subtraction problems: build problems by overlapping appropriate cards. Physically break apart numbers and rearrange to support varied mental strategies. Can also use the cards to link manipulative strategies to symbolic strategies.

Puzzles: Have all relevant cards face up. Students pick out card needed to make a number sentence true. Examples:

| 2 | 0 | + |  | 5 | $=$ |
| :--- | :--- | :--- | :--- | :--- | :--- |


| 2 | 0 | + | 5 | $=$ | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | Needs an 8 and two tens place separated by 30. (Eg. 10 and 40)


$8|+4|$|  |  |  |
| :--- | :--- | :--- |
| 8 | +4 | $=\square$ | Needs a 3 and two tens places separated by 50.

Subtraction squeeze: Players can cooperate or compete. Choose three tens and three ones. Make 2 two digit numbers that are as close as possible on the number line. Example: A player pulls a 10,40 and 60 , and a 2,5 , and 8 . They make an 18 and a 45 , so they squeezed down to 27 apart. Could they have done better?


| 0 | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 6 | 7 | 8 | 9 | 1 | 0 |
| 2 | 0 | 3 | 0 | 4 | 0 |
| 5 | 0 | 6 | 0 | 7 | 0 |
| 8 | 0 | 9 | 0 | $?$ | 0 |
| 1 | 0 | 0 | 2 | 0 | 0 |



