

SCROLLING HUNDREDS BOARD

**Overview:**

This program is designed to help students see the patterns that are found in our numeration system. This app shows numbers well beyond the usual 99 or 100, and can scroll all the way to 2000.

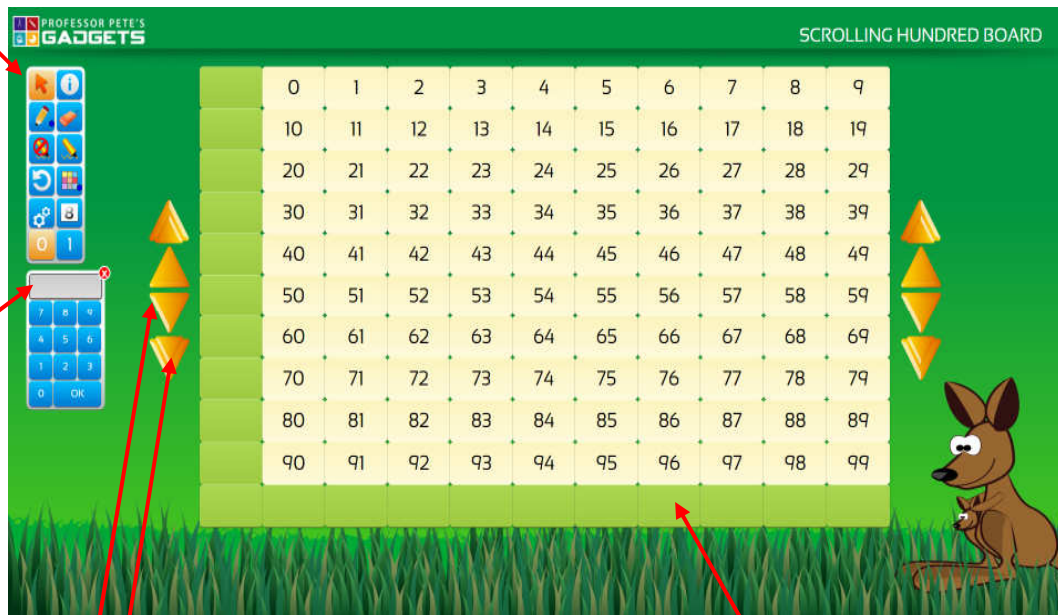
Built into the app are functions to reveal multiples of any number 2 to 12, prime and composite numbers, and even square and triangular numbers.

Teacher tools allow you to highlight a single number, a row or column; draw annotations directly onto the screen; and hide or reveal numbers, at the click of a button.

**Main Interface:**

**Toolbox:** on-screen tools to illustrate features of numbers

**Keypad:** Enter the starting number up to 1900



**Scroll Arrows:** scroll the board by either a row of ten or a full screen of a hundred.

**Rows or column buttons:** click to highlight a row or column, or use the Hide tool to hide or reveal an entire row or column.

**Tool Panel:**



**Arrow:** resets cursor to a pointer

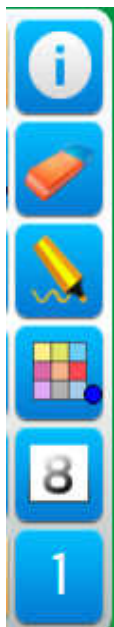
**Pen:** hold down for a popout panel to select one of the nine shades available

**Unhighlighter:** removes all highlights from cells

**Reset:** resets board back to zero or one, removes highlights and hidden cells

**Options:** pop-out panel allows for selection of multiples, and special subsets of numbers

**Zero:** sets the first number as zero and the first column as a multiple of ten



**Information:** about the program

**Eraser:** removes all pen marks

**Highlighter:** allows cells to be highlighted in various shades

**Highlighter selection panel:** hold down and choose from a multitude of shades for your highlighter

**Hide tool:** click hide tool on any cell, or any green cells for rows or columns to hide the numbers on the board

**One:** sets the first number as one and first column as having numbers with 1 one

### Toolbox: preset selection

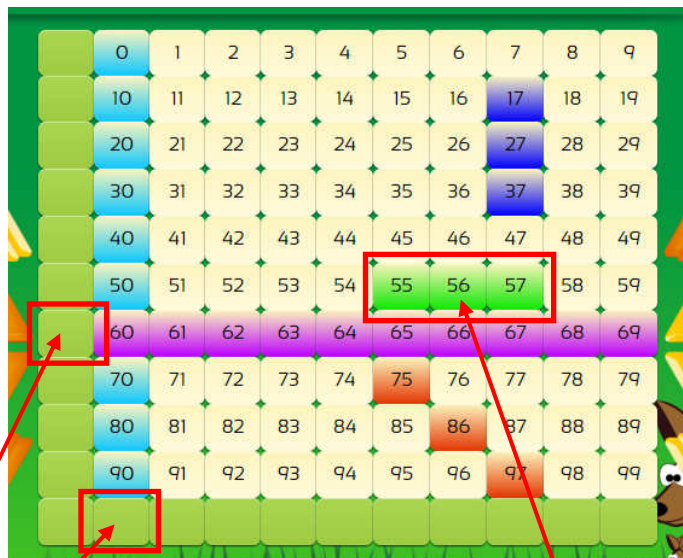


**Pop-out Box:** select to highlight odd / even numbers multiples  
 P - prime numbers  
 C - composite numbers  
 square numbers  
 triangular numbers

### Toolbox: cell highlighter pen



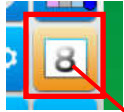
**Pop-out Box:** select shade to highlight individual cells



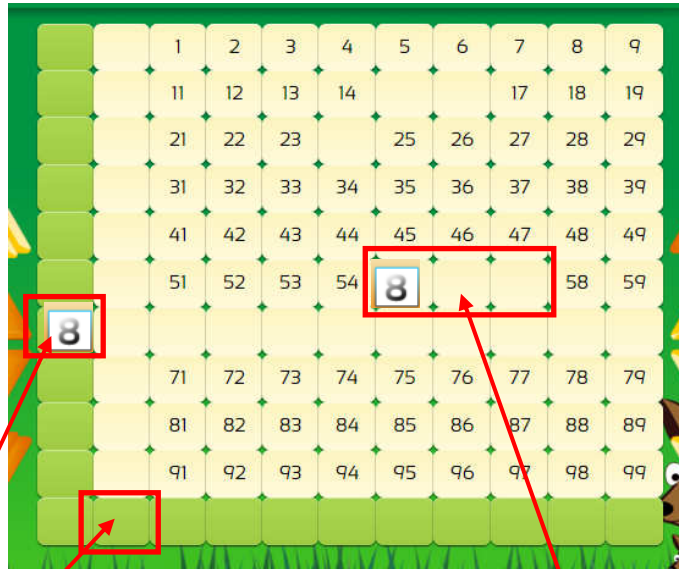
**Highlight Cells:** by columns or rows

**Highlight Cells:** individually

Toolbox: cell hide tool

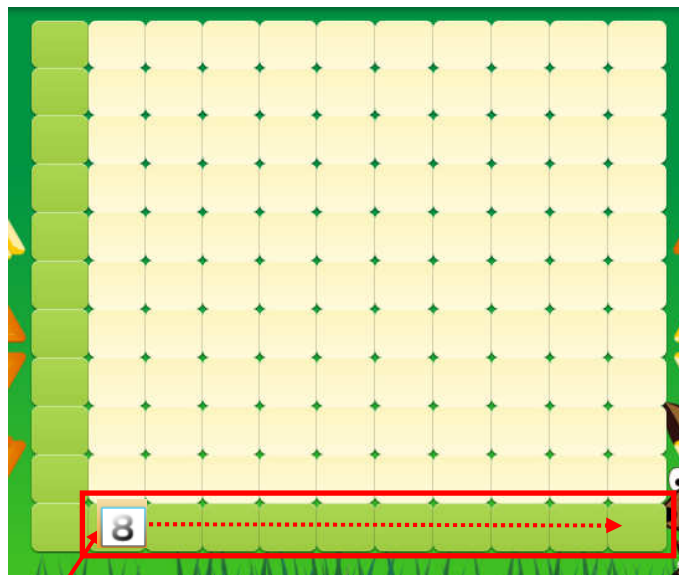


**Hide Tool:** select to change cursor to the hide tool; click the tool onto the grid.



**Hide cells:** columns or rows

**Hide cells:** individually



**Hide all cells:** slide hide tool over all column cells

SCROLLING HUNDREDS BOARD

Toolbox: start with 0 or 1

0 selected: default



0	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	51	52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99

1 selected:



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
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Pattern continues for all screens up to 1900 or 1901

201	202
211	212
221	222
231	232
241	242
251	252
261	262
271	272
281	282
291	292

0 or 1 : Which is Best?

Whether to start with 0 or 1 may depend on personal preference or your local curriculum.

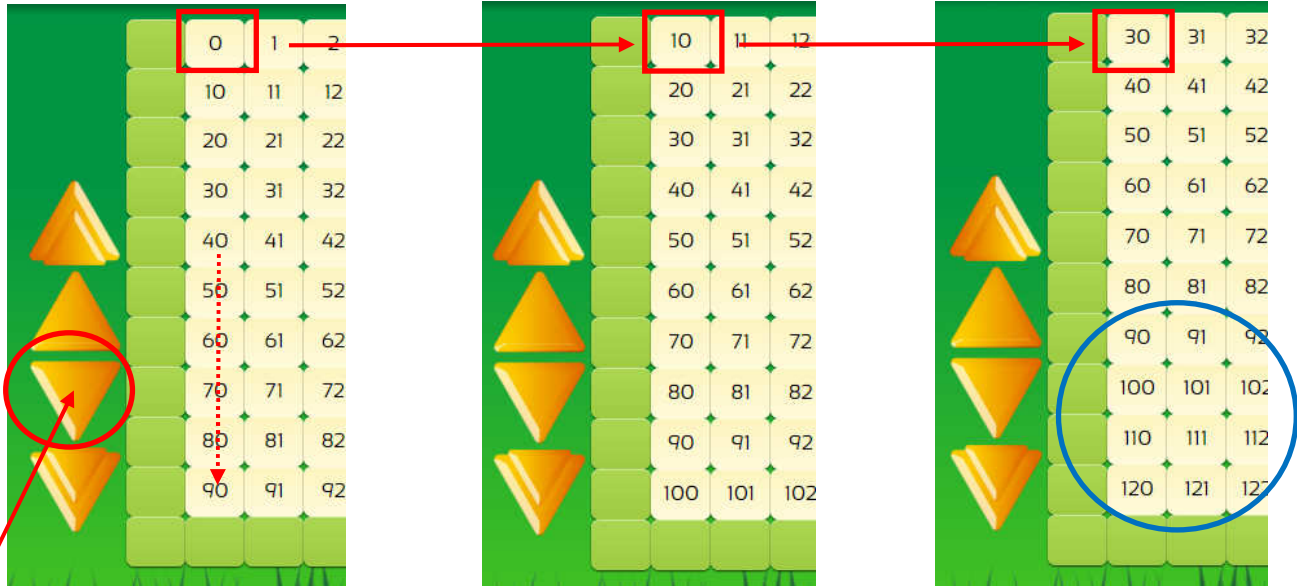
**Case for 0:** This is where most counting start and finishes such as on a number line. This puts all numbers in a single decade (e.g., 20 to 29) on a single row.

**Case for 1:** This a natural starting point for many students. The change to the next ten is at the end of the row. Counting to ten is all on the same row. Each grid ends neatly on a multiple of 100.

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### Scroll Arrows: the ten arrow

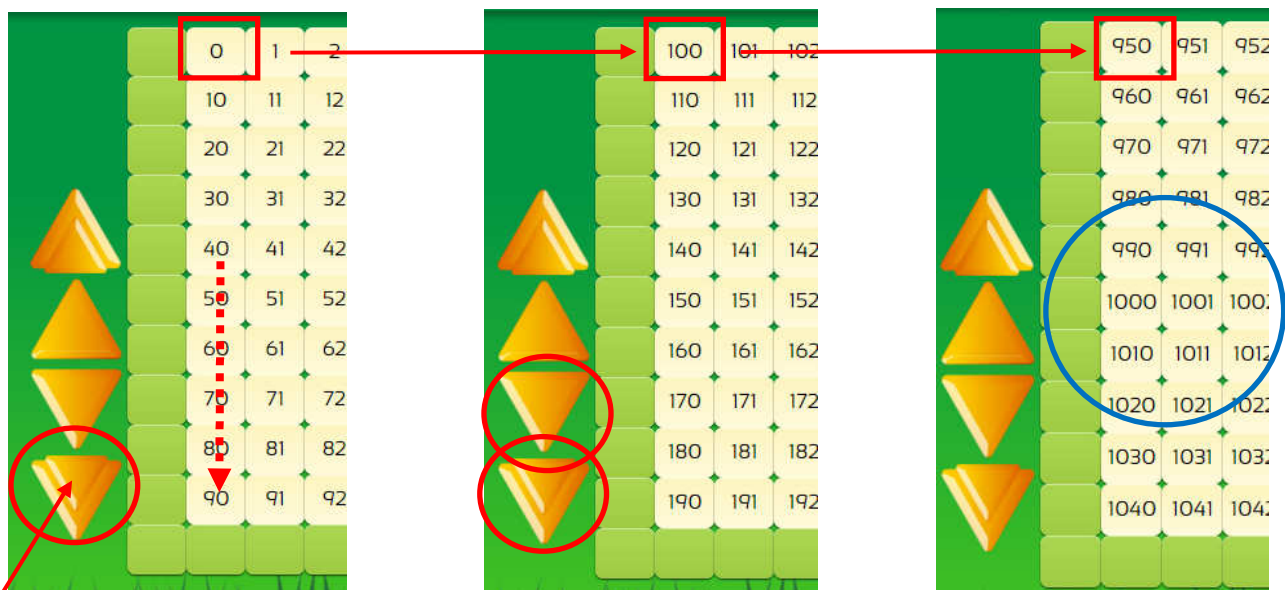
Scroll the hundreds board down or up by tens. This allows for counting past the change of hundreds.



**Ten arrow:** click to scroll the hundred board by ten at a time

### Scroll arrows: the hundred arrow

Scroll the hundreds board down or up by one hundred at a time. This allows for counting over the change of thousands place.



**Hundred arrow:** click to scroll hundreds board by a hundred at a time

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**Keypad:**

The Scrolling Hundreds Board will show any number up to 1999 or 2000. The largest number which can be entered via the keypad is 1900.

The screenshot shows the 'SCROLLING HUNDREDS BOARD' interface. On the left is a keypad with a display showing '1900'. The keypad has buttons for digits 0-9, a '1' button, and an 'OK' button. A red circle highlights the '1' button, with an arrow pointing to the '1999' cell in the bottom row of the board. The board itself is a 10x10 grid of yellow cells containing numbers from 1900 to 1999. A cartoon kangaroo is sitting on the right side of the board. The background is green with a grassy bottom edge.

Highest number that can be entered

Click the "1" button to show the number 2000 here