## Sample Activity: Counting to 120

## Resources

Copies of the 120 Grid inserted into a plastic sleeve, 2 coloured markers per student.

## Prior Experiences

Students will be ready for this page if they have had experiences with:

- counting in $1 \mathrm{~s}, 2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s ,
- reading numbers to 120 ,
- exploring counting sequences on a 120 grid,
- bridging through 10s and 100.

120 Grid

| 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 |
| 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 |
| 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |

- 2019 Natural Matss


## About this Activity

The problem presented on this page invites students to mark the given counting patterns onto the 120 grid. As you read the problem ask the students who they think will mark most squares on the grid, Zoë or Jake, and why. Expect comments such as:
" 120 is a bigger number than 60 ."
"Counting in $2 s$ makes small jumps so it will take a lot to get to 60 ."
"It takes twenty 5-cent coins to get to 100 cents and that's a dollar".
You may want to demonstrate (as shown below) a strategy for marking on the boards that will make the shared spaces easy to spot and count.


## Sample Activity: Counting to 120

## Observer's Guide

As the students work on the page encourage them to recite the counting pattern as they mark the squares. Some students might spontaneously notice that all the shared spaces are friendly numbers, if they do not notice, ask them to look at the numbers in both sequences and ask if they can see any patterns in the numbers that Lu and Jan both land on and why that happens every time.

## Differentiation

If necessary, change the starting numbers for Zoë and Jake to make the problem accessible.
In addition to the questions given you can make up others like those shown below or even better challenge the students to make up their own sequences and questions.
"If Zoë counted in 10s to 120 and Jake counted in 5 s to 75 , who would cover most squares? Which numbers would they both land on?" "If Zoë counted on from 35 in 5 s to 105 and Jake counted on in 2 s from 80 to 120 who would cover most squares? Which numbers would they both land on?"
As you interact with and observe the students, you will be able to note the following indicators:

| 1. Counts forwards and backwards to 120 from any starting number |
| :--- | :--- |
| 1.2. counts in 2 s |
| 1.3. counts in 5 s |
| 1.4. counts in 10 s |
| 5. Describes and creates number patterns |
| 5.3. creates, continues and describes patterns |



Jake is counting in
5 s to 120.

## 2 s to 60. Zoe is counting in

 counting patterns. the 120 grid to show their Zoë and Jake place counters on


## 120 Grid

| 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 |
| 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 |
| 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |

