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 1s, 2s, 5s and 10s,
- 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

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 2s 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.



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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 5s to 75, who would cover most squares? Which numbers would they both land on?" "If Zoë counted on from 35 in 5s to 105 and Jake counted on in 2s 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 2s						
1.3. counts in 5s						
1.4. counts in 10s						
5. Describes and creates number patterns						
5.3. creates, continues and describes patterns						

mathematical



Counting to 120

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



Zoe is counting in 2s to 60.



Jake is counting in

on the 120 grid? Who places the most counters

5s to 120.

120 Grid

111	101	91	81	71	61	51	41	31	21	11	1
112	201	26	82	72	62	52	42	32	22	12	2
113	103	56	83	73	63	53	43	33	23	13	ω
114	104	94	84	74	64	54	44	34	24	14	4
115	105	56	28	75	65	55	45	35	25	15	л
116	106	96	98	76	66	56	46	36	26	16	6
117	107	76	78	77	67	57	47	37	27	17	7
118	801	86	88	78	89	58	48	38	28	81	8
119	901	66	68	79	69	59	49	39	29	19	9
120	110	100	90	08	70	60	50	40	30	20	10

120 Grid

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