## Number Sort\*

\*Using Dan Finkel's Prime Climb

Goal: See numbers and the relationship between numbers differently and group the numbers according to the patterns seen.

Grade Level: Intermediate (Grades 5 to 7)

Previous Learning: A basic understanding of factors and multiples

Materials: A computer with access to the internet, a Google Suit account

What do you notice about these numbers?

3	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

What about these numbers?

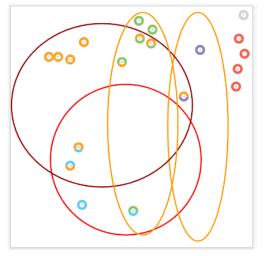


What patterns do you notice? What do you think the colours mean? How would you sort the numbers?

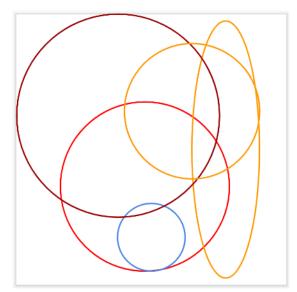
Go to this <u>link</u> and create your own copy of the slide. [You would need to sign into a Google account]

Sort the numbers by dragging them into circles like a Venn diagram

- 1. Decide how you want to group the numbers. [Based on number of factors or colour or something else]
- 2. Place the circles you would want to use on the slide. [You can add, remove, or reshape the circles]



3. Move the numbers



into the appropriate circles. [You may need to rework the circles to put all the numbers]

Think about it:

Would there be a better way to sort the numbers?

What if you arranged the numbers in a different way say by 8's not 10's or you created a spiral, what patterns would you notice?

Would larger numbers fit into your groupings?