



What story do these numbers tell?

What is in a bunch of numbers? What stories do the numbers tell? It all depends on the way we look at them! Probably, we all have different instincts about what we might do with a given group of numbers. In this activity you are going to be asked to demonstrate and build on each other's instincts. The task starts very simply - you will be given a set of numbers and asked to 'arrange them' so that they tell their story?

Show me the numbers!

Here are 4 sets of numbers. The task is to come up with a way of arranging the numbers in a way that tells a story about the numbers. Then consider how you can show all 4 sets of numbers such that comparisons between them can be easily made. The class may split up, each group working with one set of numbers to start with and then working together to show them together.

Stage 1 - Considerations

Think about the following as you explore different ways of showing the numbers.

- What do you notice about the number set from the start? [L] [SEP]
- What are the features of the number set you think might set it apart from another set? [L] [SEP]
- How can you show these features by the way you set them out? [L] [SEP]
- Try and find a way that shows ALL of the key features of the number set. [L] [SEP]
- Have a look at the other representations the other groups have chosen - how different or similar [L] are they to yours? What do their representations show you that yours doesn't? Vice-versa? [L] **Stage 2 - Data sets** [SEP] Now imagine that these are all data sets. Each number is a piece of information about some things that have been surveyed. It is the same piece of information in each case. The representation has to tell the story of the data set? [L] [SEP]
- How, if at all, does this impact how you want to set them out? [L]
- Having settled on a representation - are there any key numbers in the set that need to be [L] highlighted because of the role they have in telling the story? [L] [SEP]
- Have a look at the other representations the other groups have chosen - how different or similar [L] are they to yours? What do their representations show you that yours doesn't? Vice-versa? [L] **Stage 3 - All the data sets together** [SEP] Now explore ways of showing all of your data sets together so they can be compared! What does this add to the story? Now ask your teacher to tell you what the data is about. [L]

Set 1

22	20	92	54
96	35	85	57
34	41	33	48
61	36	67	21
	27	59	55

Set 2

11 . 1	4 . 3	4	11
14 . 2	7	24	25
30 . 6	13 . 6	20	32
14 . 6	8 . 5	14	14
	12	5 . 4	11 . 3

Set 3

12 . 5	9 . 3	3	3 . 4
2 . 9	3 . 6	1 . 9	1 . 6
3 . 3	2 . 8	3 . 5	2
5 . 1	2 . 9	5 . 3	1 . 5

	1 . 7	2 . 2	3 . 2
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Set 4

66 . 3	27 . 2	22	12 . 9
27 . 9	24 . 6	13	20
5 . 3	9 . 2	27	3
30 .	38	2	7

7			
	17	8	6 . 8

17

8

6 . 8