

Monday's maths - finding the range, mode and mean.

Use the 'How to build a rocket' guide to build and launch a balloon rocket. You will then need to create a table to start recording how long it takes your rocket to get from one side of your string to the other. I suggest your table is simple and looks something like this:

| Launch number | Time taken |
|---------------|------------|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |

You could extend your table to include results of several people/several rockets if you have family members that wish to join in.

Once you have completed and timed 5 launches, you can work out the range, mode, mean and median using the explanations below.

- Range = highest number take away smallest number
- Mode = most common result
- Mean = add up all numbers and divide by total number of them

Here is an example table of results:

| Launch number | Time taken |
|---------------|------------|
| 1 | 43 sec |
| 2 | 41 sec |
| 3 | 50 sec |
| 4 | 45 sec |
| 5 | 43 sec |

To work out my range I need to do $50 - 41$ (highest number take away the smallest number) so I have a range of 9 seconds.

My most common result is 43 seconds because I got this time twice.

To find the mean, I need to do $43 + 41 + 50 + 45 + 43 = 222$
Then $222 \div 5 = 44.4$ seconds (I used a calculator for this bit!)