**Task One**

Petrol costs 130.9p per litre. Car A holds 50 litres of fuel. How much would a full tank of petrol cost? Car D costs £85.09 to fill up. What is the capacity of the fuel tank? Copy and complete this table.

|  |  |  |
| --- | --- | --- |
| **Car** | **Size of fuel tank (litres)** | **Cost of full tank @ 130.9p per litre** |
| A | 50 |  |
| B | 75 |  |
| C | 35 |  |
| D |  | £85.09 |
| E | 45 |  |
| F |  | £62.83 |
| G |  | £45.82 |
| H | 70 |  |

Plot this information on a graph. You could use graph plotting software or a spreadsheet.

**Task Two**

Nat has won a jar of sweets in a competition. There are 600 sweets in the jar.

There are 120 pupils in his year group at school. If he feels generous and shares them out between everyone, how many sweets will each of these pupils receive?

If instead Nat decides to share them equally between everyone in his tutor group, he works out that there will be 20 sweets each. How many pupils are in his tutor group?

Copy and complete this table.

|  |  |
| --- | --- |
| **Number of pupils** | **Number of sweets each** |
| 120 |  |
|  | 20 |
| 60 |  |
| 50 |  |
|  | 25 |
| 40 |  |

Plot this information on a graph too.

**Task Three**

The two graphs should look different. What are the notable features of each one? Can you think of a reason for the difference?

Try to think of other pairs of variables that would follow a similar the same pattern as task one.

Try to think of other pairs of variables that would follow a similar the same pattern as task two.

*Figures last updated: June 2014*