

# Royal Statistical Society Chart Competition

Maths Week England  
9<sup>th</sup> – 14<sup>th</sup> November 2020

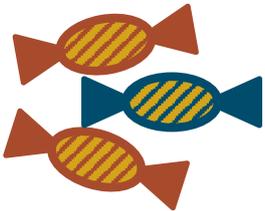
organised by the  
**Young Statisticians Section**  
with support from the  
**RSS Statistical Ambassadors**



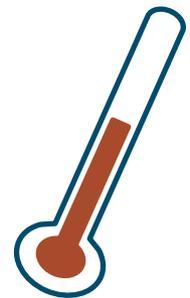
**Further details on our website:**  
<https://statsyss.wordpress.com/maths-week-england/>

# Create a chart using data that you have collected for Maths Week England

## 1. Collect some data about something important to you.



Your favourite sweets  
The temperature in your garden  
Your family's heights

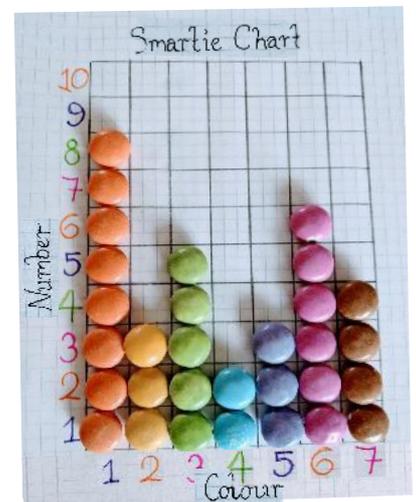


## 2. Create a chart using the data you have collected.

It can be any type of chart:



Pictogram  
Bar chart  
Line graph  
Scatter plot



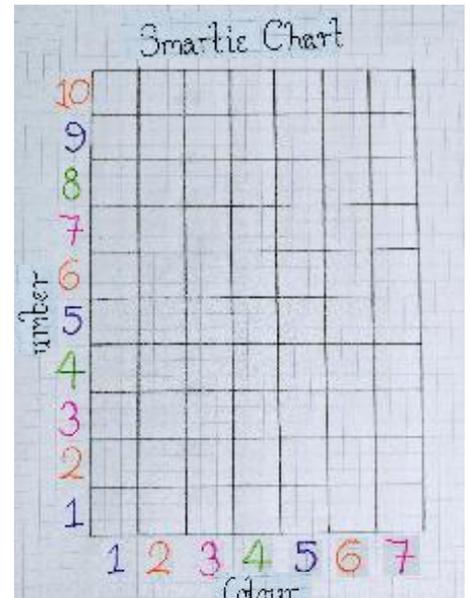
## 3. Send us your chart, our favourite will win a prize.

Instructions to create a Smartie Chart are on the next page.

# A Smartie Chart

## Step 1: Sort your Smarties

Sort your Smarties into piles based on colour.  
Count the number of sweets in each pile.

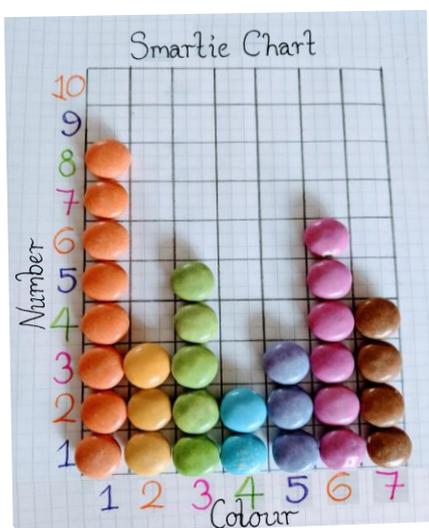


## Step 2: Draw and label your graph axes.

Draw a horizontal line across the bottom of your page.  
Divide the line into sections, one for each colour.  
We have 7 Smarties colours so have split our line into 7 sections.  
Add the label "Colour" below this line, this is your x-axis.

Draw a vertical line up the left-hand side of your page.  
Divide the line into sections, to count the number of sweets.  
We have split our line into 10 sections.  
Add the label "Sweets" to the left of this line, this is your y-axis.

Draw lines going up from your x-axis and across from your y-axis to create a grid. Make sure your grid has enough space to fit a sweet.



## Step 3: Add your Smarties

Add your Smarties to the graph:  
One colour at a time.  
Starting from the bottom and building up.  
Start a new line for each new colour.

**Well done!**

**You've made a Smartie Chart!**

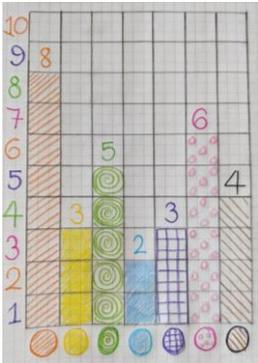
**Remember to take a photo before you eat the sweets**

## Some other ideas:

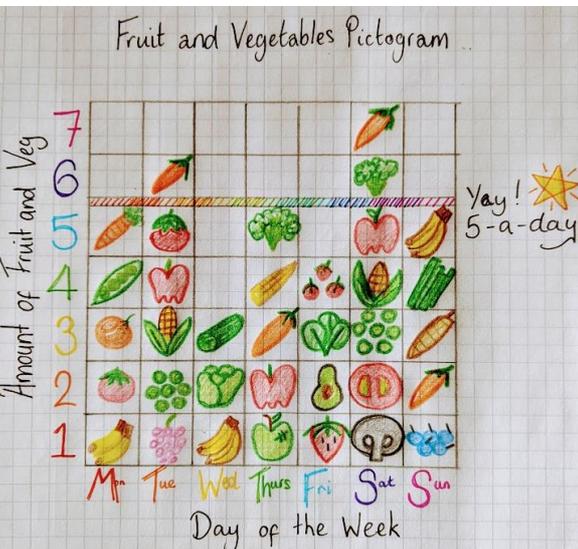
Sort your graph bars by height: tallest to shortest, or shortest to tallest.



Remove your Smarites and colour the grid using different colours and patterns.



Collect other materials, like leaves or toys, and sort using size or shape.



Draw pictures in your grid to create a pictogram.

We've made a pictogram of the fruit and vegetables we each day for a week.