

Name: _____

Smarties Percentages

1. How many Smarties are there in a box? _____
2. Is this an odd number? If it is, you may eat one Smartie. How many are left now? _____
3. How many colours are there? _____ Write the names of the colours in the first column
4. Count the number of each colour and fill in the second column

Colour	Count	Fraction	Simplified Fraction	Decimal Fraction	Percentage
total					

5. Now write the number of each colour as a fraction of the total in the third column
6. Some fractions can be simplified e.g. $\frac{4}{6} = \frac{2}{3}$. Can you simplify any of your fractions? Write the fraction for each colour in simplified form in the fourth column
7. Now express each fraction as a decimal fraction in the fifth column
8. Now calculate the percentage of each colour in the last column
9. Calculate the totals of each column and enter in the last row
10. If they made a super snack size box of Smarties that had 200% more Smarties, how many Smarties would it contain? _____
11. If you opened another box and found 15 Smarties in it, what percentage of extra Smarties would that be compared to this one? _____

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12. If you opened another box and ate one Smartie, then wanted to share the rest with some friends, how many friends could you share with and everyone get the same number? Fill in the table below with all of the possible answers

Number of people	Number of Smarties	Fraction	Simplified Fraction	Decimal Fraction	Percentage
1	12	$12/12 = 1$	1	1	100%

13. Now for the fun bit. You can eat one Smartie. Complete the second row of the table below. Then keep eating Smarties, filling in each successive row as you go

Smarties left	Fraction	Simplified fraction	Decimal fraction	Percentage
12	$12/12 = 1$	1	1	100%
11	$11/12$		0.916666 ...	
10				
9				
8				
7				
6				
5				
4				
3				
2				
1				
0				

Good work, well done!