1) Write the numbers in the correct columns (some numbers might belong in more than one column).

16, 40, 36, 55, 72, 24, 30

Multiples of 2	Multiples of 3	Multiples of 5	Multiples of 10

2) Look at the numbers in each column. What do you notice? Write a rule for each column about how to identify if a number is a multiple.

a) Multiples of 2

b) Multiples of 3

c) Multiples of 5

d) Multiples of 10

3) Using your rules from question 2, sort the following numbers correctly.

7362, 8654, 6246, 3475, 4530, 3513

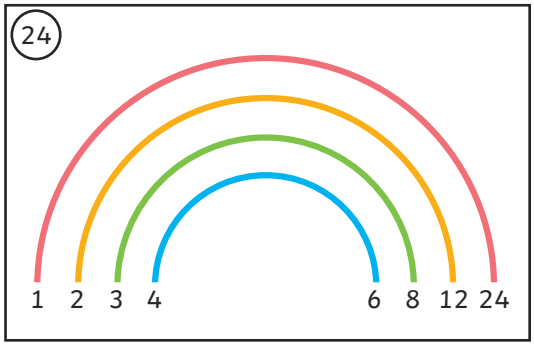
Multiples of 2	Multiples of 3	Multiples of 5	Multiples of 10

1) Sort these numbers into the correct columns. Remember: they might be factors of more than one number.

2, 5, 8, 12, 4, 10, 9, 3

Factors of 12	Factors of 40	Factors of 36	Factors of 24

2) Look at the table from question 1. Which factors are still missing for each number?
Draw factor rainbows, like the example, to help you identify missing factors and then add them to the table below.



Factors of 12	Factors of 40	Factors of 36	Factors of 24

3) Tatsiana wants to use a systematic way to identify factors to make sure she doesn't miss any. Can you show a systematic way of identifying all the factors of 48? You could use a factor rainbow or a different method.

1)

Multiples of 2	Multiples of 3	Multiples of 5	Multiples of 10
16	36	40	40
40	72	55	30
36	24	30	90
72	30	90	
24	90		
30			
90			

2) a) The final digit is even.

b) The digit total is 3, 6 or 9 (or a multiple of 3).

c) The final digit is 0 or 5.

d) The final digit is 0.

3)

Multiples of 2	Multiples of 3	Multiples of 5	Multiples of 10
7362	7362	3475	4530
8654	6246	4530	2940
6246	4530	2940	
4530	3513		
2940	2940		

1)

Factors of 12	Factors of 40	Factors of 36	Factors of 24
2	2	2	2
4	5	12	8
3	8	4	12
12	4	9	4
	10	3	3

2)

Factors of 12	Factors of 40	Factors of 36	Factors of 24
1	1	1	1
6	20	36	24
	40	18	6
		6	