

MathSmart  
Guide  
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# Chapter 1

## Multiples and Factors

### 1.1 Multiples

In this unit, your child will learn what a multiple is and determine the multiples of a given integer using different approaches.

#### Finding Multiples

A multiple of an integer is the product of the integer and another integer.

**e.g.** Find the first 5 multiples of 2.

**Think** Multiply 2 by the numbers 1 to 5.

$$\begin{array}{l} 2 \times 1 = 2 \\ 2 \times 2 = 4 \\ 2 \times 3 = 6 \leftarrow \text{multiples of 2} \\ 2 \times 4 = 8 \\ 2 \times 5 = 10 \end{array}$$

Multiples of 2: 2, 4, 6, 8, 10

Your child should realize that multiples of 2 are basically products of 2 and other integers.



$$2 \times 0.5 = 1 \leftarrow \text{not a multiple of 2}$$

Even though 1 is the product of 2 and 0.5, it is not a multiple of 2 because 0.5 is not an integer.

A hundreds chart is a useful tool for finding multiples by identifying the patterns they make. Try the activity below with your child and have him or her do the questions to consolidate his or her understanding of multiples.



### Activity

Colour the multiples of 3 and 5 with the specified colours.



multiples of 3



multiples of 5

Encourage your child to identify a pattern when finding multiples. This will help him or her find multiples more efficiently as the numbers get bigger.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

### Questions

- 1 Describe the pattern each set of multiples forms.
- 2 Are there any multiples that are common to both 3 and 5? If so, what are they?

The multiples that are common to both numbers are called common multiples. The common multiples of 3 and 5 are 15, 30, 45, 60, 75, and 90. The concept and usage of common multiples will be further discussed in Grade 8.

