

# Powers of 10



- 1 a) Draw counters to show 342 on the place value chart.

HTh	TTh	Th	H	T	O

- b) Draw counters to show 3,420 on the place value chart.

HTh	TTh	Th	H	T	O

- c) Draw counters to show 34,200 on the place value chart.

HTh	TTh	Th	H	T	O

What is the same? What is different?

- 2 a) How many ones are there in 10?

- b) How many tens are there in 100?

- c) How many hundreds are there in 1,000?

- d) How many thousands are there in 10,000?

What do you notice?

- 3 a) How many hundreds are there in 2,000?
- b) How many hundreds are there in 4,000?
- c) How many hundreds are there in 4,300?
- d) How many hundreds are there in 4,700?

- 4 The Gattegno chart shows the numbers 58,000 and 5,800

100,000	200,000	300,000	400,000	500,000	600,000	700,000	800,000	900,000
10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000
1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9

- a) Show 580 on the Gattegno chart.

- b) Complete the sentences.

58,000 is 10 times the size of

5,800 is  times the size of 580

is 10 times the size of 58

5,800 is one-tenth the size of

58,000 is one-tenth the size of



- 5 The Gattegno chart shows the numbers 270,000 and 2,700

100,000	200,000	300,000	400,000	500,000	600,000	700,000	800,000	900,000
10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000
1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9

a) Show 27 on the Gattegno chart.

b) Complete the sentences.

270,000 is 100 times the size of

is one-hundredth the size of 2,700

- 6 1 metre is 100 times the size of 1 centimetre.

There are 100 cm in 1 m.

1 m	1 m	1 m	1 m
100 cm	100 cm	100 cm	100 cm

a) How many centimetres are there in 4 m?  cm

b) How many centimetres are there in 400 m?  cm

c) How many centimetres are there in 4,000 m?  cm

d) How many centimetres are there in 4,400 m?  cm

- 7 1 kilogram is 1,000 times the size of 1 gram.

There are 1,000 g in 1 kg.

1 kg	1 kg	1 kg
1,000 g	1,000 g	1,000 g

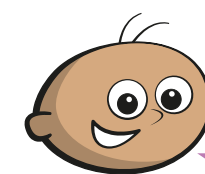
a) How many grams are there in 3 kg?  g

b) How many grams are there in 300 kg?  g

c) How many grams are there in 1,000 kg?  g

- 8 The children choose one of these number cards each.

29,000	290	2,900	290,000
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Tommy

My number is ten times the size of Annie's.



Whitney

Dexter's number is one-tenth the size of my number.



Annie

My number has two hundreds.



Dexter

My number is one hundred times the size of Annie's.

Which number does each child have?

Tommy

Whitney

Annie

Dexter

