

# Grade 5 - Place Value and Powers of Ten - Test

Common Core 5.NBT.A.1, 5.NBT.A.2 · [maths-pdf.fr/en/](https://maths-pdf.fr/en/)

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

This test covers place value and powers of 10 for Grade 5 (5.NBT.A.1 and 5.NBT.A.2). It has 9 questions worth 20 points. You have 45 minutes. Show how you move the decimal point or explain in words. Calculators are not allowed. Write all exponents clearly.

## About this test

- Grade: Grade 5
- Chapter: Place Value and Powers of Ten
- Standards: 5.NBT.A.1, 5.NBT.A.2
- Time: 45 minutes
- Total: 20 points

## Question 1 - Digits in 6,660 [2 pts]

Look at the number 6,660.

| Thousands | Hundreds | Tens | Ones |
|-----------|----------|------|------|
| 6         | 6        | 6    | 0    |

The number 6,660.

- How many times the value of the 6 in the hundreds place is the 6 in the thousands place? (1 point)
- The 6 in the tens place is what fraction of the 6 in the hundreds place? (1 point)

## Question 2 - Multiply and divide by 10 [2 pts]

Find each answer.

- $3.8 \times 10$  (1 point)
- $520 \div 10$  (1 point)

### Question 3 - Powers of 10 operations [3 pts]

Find each answer.

- a.  $0.64 \times 10^2$  (1 point)
- b.  $7.1 \times 10^3$  (1 point)
- c.  $4,300 \div 10^2$  (1 point)

### Question 4 - Exponents [2 pts]

Answer each part.

- a. Write 10,000 as a power of 10 with an exponent. (1 point)
- b. Write  $10^3$  as a standard number. (1 point)

### Question 5 - Missing exponents [2 pts]

Find the missing exponent in each equation.

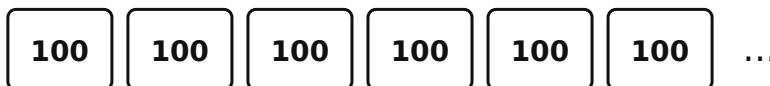
- a.  $2.9 \times 10^? = 2,900$  (1 point)
- b.  $8 \div 10^? = 0.08$  (1 point)

### Question 6 - Mei's mistake [2 pts]

Mei says that  $0.35 \times 100 = 0.3500$ . Explain her mistake and give the correct product.

### Question 7 - Peach packs [3 pts]

A farm stand has 6,000 peaches. It packs  $10^2$  peaches in each pack.



Each pack holds 100 peaches.

- a. How many packs does the stand fill? (1 point)
- b. Ten packs go in each crate. How many crates does the stand fill? (2 points)

### Question 8 - Cupcake sale [3 pts]

A school sells cupcakes for \$1.25 each. Find the money collected for each number of cupcakes.



Three sales.

- a. 10 cupcakes (1 point)
- b. 100 cupcakes (1 point)
- c. 1,000 cupcakes (1 point)

### Question 9 - Digits in 0.88 [1 pt]

Complete the sentence: The 8 in the hundredths place of 0.88 is \_\_\_\_ of the value of the 8 in the tenths place.