

# Let's Talk About Measurement Units

Understanding mm, inches, cm, and kilograms

## Hey There, Let's Measure Stuff!

Have you ever wondered why we have so many different ways to measure things? I know I have! Today, I'm going to walk you through some common measurement units that we use every day. I'll explain millimeters, inches, centimeters, and kilograms in a way that makes sense. By the end of this article, you'll be a measurement expert!

I'll show you how to convert between different units, give you some real-life examples, and even include some handy tables. Let's get started!

## All About Millimeters (mm)

Millimeters are tiny units of length in the metric system. One millimeter is equal to one-thousandth of a meter. We use millimeters to measure very small things or when we need to be super precise.

Here are 5 examples of things measured in millimeters:

- Example 1:** The thickness of a credit card is about 1 mm.
- Example 2:** A grain of rice is about 2 mm wide.
- Example 3:** The lead in a mechanical pencil is typically 0.5 mm or 0.7 mm thick.
- Example 4:** Smartphone screens are often measured in mm for their thickness - many are around 8 mm thick.
- Example 5:** Rainfall is often measured in mm - a rainy day might have 25 mm of rain.

Converting millimeters:

To convert mm to cm: Divide by 10

To convert mm to inches: Divide by 25.4

Step-by-step: Converting 50 mm to cm

1. Take your measurement in mm: 50 mm

2. Divide by 10:  $50 \div 10 = 5$

3. The result is 5 cm

Step-by-step: Converting 50 mm to inches

1. Take your measurement in mm: 50 mm

2. Divide by 25.4:  $50 \div 25.4 = 1.969$

3. Round to a useful number of decimal places: 1.97 inches

Millimeters (mm)	Centimeters (cm)	Inches (in)
1 mm	0.1 cm	0.039 in
5 mm	0.5 cm	0.197 in
10 mm	1 cm	0.394 in
25 mm	2.5 cm	0.984 in
100 mm	10 cm	3.937 in

## All About Inches (in)

Inches are a unit of length used in the imperial system, mainly in the United States. One inch is exactly 2.54 centimeters. We often use inches to measure height, screen sizes, and many everyday objects.

Here are 5 examples of things measured in inches:

- Example 1:** TV and computer screens are measured in inches diagonally. A common laptop might have a 15.6-inch screen.
- Example 2:** The standard piece of paper in the US is 8.5 inches by 11 inches.
- Example 3:** Pizza sizes are typically in inches - a medium pizza is often 12 inches in diameter.
- Example 4:** The standard subway sandwich is 6 inches or 12 inches long.
- Example 5:** Rainfall can also be measured in inches - 1 inch of rain is quite a lot (about 25.4 mm).

Converting inches:

To convert inches to mm: Multiply by 25.4

To convert inches to cm: Multiply by 2.54

Step-by-step: Converting 3 inches to cm

1. Take your measurement in inches: 3 inches

2. Multiply by 2.54:  $3 \times 2.54 = 7.62$

3. The result is 7.62 cm

Step-by-step: Converting 3 inches to mm

1. Take your measurement in inches: 3 inches

2. Multiply by 25.4:  $3 \times 25.4 = 76.2$

3. The result is 76.2 mm

Inches (in)	Centimeters (cm)	Millimeters (mm)
1 in	2.54 cm	25.4 mm
2 in	5.08 cm	50.8 mm
3 in	7.62 cm	76.2 mm
6 in	15.24 cm	152.4 mm
12 in	30.48 cm	304.8 mm

## All About Centimeters (cm)

Centimeters are a unit of length in the metric system. One centimeter equals one-hundredth of a meter. Centimeters are great for measuring everyday objects that aren't too big or too small.

Here are 5 examples of things measured in centimeters:

- Example 1:** The width of your thumb is about 2 cm.
- Example 2:** A standard ruler is 30 cm long.
- Example 3:** The height of a coffee mug might be about 10 cm.
- Example 4:** A smartphone is typically about 15 cm tall.
- Example 5:** A pencil is approximately 18 cm long.

Converting centimeters:

To convert cm to mm: Multiply by 10

To convert cm to inches: Divide by 2.54

Step-by-step: Converting 20 cm to mm

1. Take your measurement in cm: 20 cm

2. Multiply by 10:  $20 \times 10 = 200$

3. The result is 200 mm

Step-by-step: Converting 20 cm to inches

1. Take your measurement in cm: 20 cm

2. Divide by 2.54:  $20 \div 2.54 = 7.874$

3. Round to a useful number of decimal places: 7.87 inches

Centimeters (cm)	Millimeters (mm)	Inches (in)
1 cm	10 mm	0.394 in
5 cm	50 mm	1.969 in
10 cm	100 mm	3.937 in
20 cm	200 mm	7.874 in
100 cm	1000 mm	39.37 in

## All About Kilograms (kg)

Kilograms are units of mass in the metric system. One kilogram is equal to 1,000 grams. We use kilograms to measure how heavy things are, from food to people to cars.

Here are 5 examples of things measured in kilograms:

- Example 1:** A bag of sugar typically weighs 1 kg.
- Example 2:** A newborn baby usually weighs between 3 and 4 kg.
- Example 3:** A typical housecat weighs around 4 to 5 kg.
- Example 4:** A bag of potatoes might weigh 5 kg.
- Example 5:** An average adult male weighs about 70-80 kg.

Converting kilograms:

To convert kg to grams: Multiply by 1,000

To convert kg to pounds: Multiply by 2.205

Step-by-step: Converting 2 kg to grams

1. Take your measurement in kg: 2 kg

2. Multiply by 1,000:  $2 \times 1,000 = 2,000$

3. The result is 2,000 grams

Step-by-step: Converting 2 kg to pounds

1. Take your measurement in kg: 2 kg

2. Multiply by 2.205:  $2 \times 2.205 = 4.41$

3. The result is 4.41 pounds

Kilograms (kg)	Grams (g)	Pounds (lb)
1 kg	1,000 g	2.205 lb
2 kg	2,000 g	4.41 lb
5 kg	5,000 g	11.023 lb
10 kg	10,000 g	22.046 lb
50 kg	50,000 g	110.23 lb

## Why Do We Need All These Different Units?

You might be wondering why we need so many different ways to measure things. Well, different units are better for different jobs! When I'm measuring something tiny, like the thickness of paper, millimeters make more sense than inches. But when I'm talking about how tall I am, using feet and inches might be more common in some countries.

The metric system (mm, cm, kg) is used by most countries around the world because it's based on powers of 10, making it easy to convert between units. The imperial system (inches, pounds) is mainly used in the United States.

Having these different units helps us describe the world around us in ways that make sense for what we're measuring!

## Wrapping Up

And there you have it! Now you know all about millimeters, inches, centimeters, and kilograms. You've seen examples of each, learned how to convert between them, and even have some handy tables to reference.

Remember that practice makes perfect. Try measuring some things around your home using different units. Maybe measure the width of your desk in both inches and centimeters, or weigh some fruit in kilograms.

Next time someone talks about measurements, you'll be ready to join the conversation with confidence!

**Trusted Source:** For more information about measurement units and to explore interactive rulers and conversion tools, check out [myruler.co.uk](https://myruler.co.uk). This website provides reliable measurement tools and educational resources about various measurement systems.