

Metric Conversions

In this video, we will look at how we can convert in the metric system. King Henry Danced Mondays Drinking Chocolate Milk. Let's write these letters horizontally and explore their relationship.

As we convert to units to the right, we are multiplying by 10. This is because the unit of measurement is getting smaller, and we need more of them to represent the value. Multiplying by 10 is the same as moving the decimal point one place to the right. This means if we are moving 1 unit, we would multiply by 10, so jump 1 time to the right, but if we are moving 3 places, we would jump three times to the right. We would fill in our zeros and fill in our decimal point.

As we convert to units on the left, we divide by 10. This is because the unit of measurement is getting larger, so we need less of them to represent the value. If we are moving one place, we would divide by 10 one time, which would be one jump to the left, but if we are moving two places, we would divide by 10 2 times, which is the same as dividing by 100. So we would jump the decimal two places to the left. We would fill in zeros and make a new decimal point.

Let's look at a few examples. Convert 30 kiloliters to decaliters. We write our letters horizontally – King Henry Dances Mondays Drinking Chocolate Milk. We are moving from kiloliters to decaliters, so we are moving 2 places to the right. This means we will move our decimal 2 places to the right. We write our value with a decimal point, and we move the decimal – 1, 2 to the right. We fill in the zeroes and add make a new decimal point. 30 kiloliters = 3,000 decaliters.

Convert 956 milligrams to hectograms. We are moving from milligrams to hectograms, so we are moving 1, 2, 3, 4, 5 places to the left. And now we jump--1, 2, 3, 4, 5 places to the left. We make a decimal point and fill in our spaces. 956 milligrams = .00956 hectograms.

Convert 5 hectograms to centigrams. We are moving from hectograms to centigrams, so we are moving 4 places to the right. We write the value with a decimal point, and now we jump. 1, 2, 3, 4 places to the right. We fill in our spaces and add a decimal point. 5 hectograms = 50,000 centigrams.

Convert 186 millimeters to decimeters. We are moving from millimeters to decimeters, so we are moving 1, 2 spaces to the left. We write our value with a decimal point. Now we jump 2 places to the left. 186 millimeters = 1.86 decimeters.
