**Metric**

A metric is a single, quantifiable type of data that can be used for measurement.

Think of it this way. **Data starts as a collection of raw facts, until we organize them into individual metrics that represent a single type of data.**

Metrics can also be combined into formulas that you can plug your numerical data into.

In our earlier sales revenue example, all that data doesn't mean much unless we use a specific metric to organize it.

So, let's use revenue by individual salesperson as our metric.

Metrics usually involve simple math. Revenue, for example, is the number of sales multiplied by the sales price. Choosing the right metric is key.

**Data** contains a lot of raw details about the problem we're exploring.

But we need the right metrics to get the answers we're looking for. Different industries will use all kinds of metrics to measure things in a data set. Let's look at some more ways businesses in different industries use metrics. So, you can see how you might apply metrics to your collected data.

**Roi, or return on investment**

Companies use this metric all the time. Roi, or return on investment is essentially a formula designed using metrics that let a business know how well an investment is doing.

The roi is made up of two metrics,

1. The net profit over a period of time and,
2. The cost of investment.

By comparing these two metrics, profit and cost of investment, the company can analyze the data they have to see how well their investment is doing. This can then help them decide how to invest in the future and which investments to prioritize.

We see metrics used in marketing too. For example, metrics can be used to help calculate customer retention rates, or a company's ability to keep its customers over time.

Customer retention rates can help the company compare the number of customers at the beginning and the end of a period to see their retention rates. This way the company knows how successful their marketing strategies are and if they need to research new approaches to bring back more repeat customers.

Different industries use all kinds of different metrics. But there's one thing they all have in common: they're all trying to meet a specific goal by measuring data.

This metric goal is a measurable goal set by a company and evaluated using metrics. And just like there are a lot of possible metrics, there are lots of possible goals too.

**Metric goals and formulas are great ways to measure and understand data. But they're not the only ways.**