

# Data Collection Posters

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**About:** Data is one of the most important skills scientists use to learn about our world. Below are a collection of visual aids that can support students in learning about data.

## How to use this resource:

As students work through projects they will:

- Collect data by reading the Zines.
- Make observations of scientific phenomena.
- Apply what they have learned using evidence in their Take Action Projects.

## Teacher Tips:

As students complete project modules, check-in with students by:

- Having them share data collected or learned
- Asking them to create further analysis
- Having them generate new questions to investigate based on their findings



## What is data?

**Data is information that we collect about the world.**

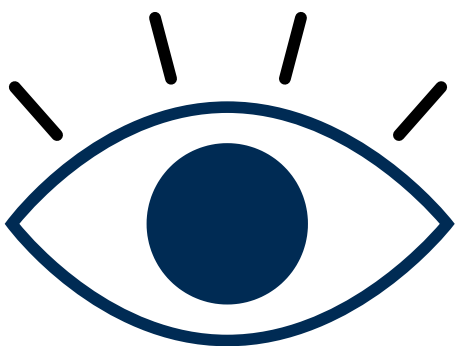
**In order to use data for science, humans need to be able to classify, sort, organize, represent, and interpret it.**

**Our brains collect information constantly.**

## Types of Data



## How is data collected?



- Data is collected by making observations.



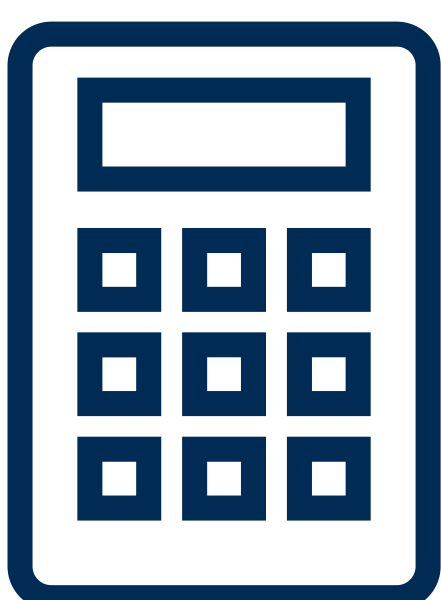
- Data is collected by researching for facts.



- Data is collected by counting.



- Data is collected by measuring time, weight, dimensions, and temperatures.



- Data is collected by calculating quantities.

# What do we do with data?

After **data** is collected, it is used to make predictions and find answers for questions we have about the world.

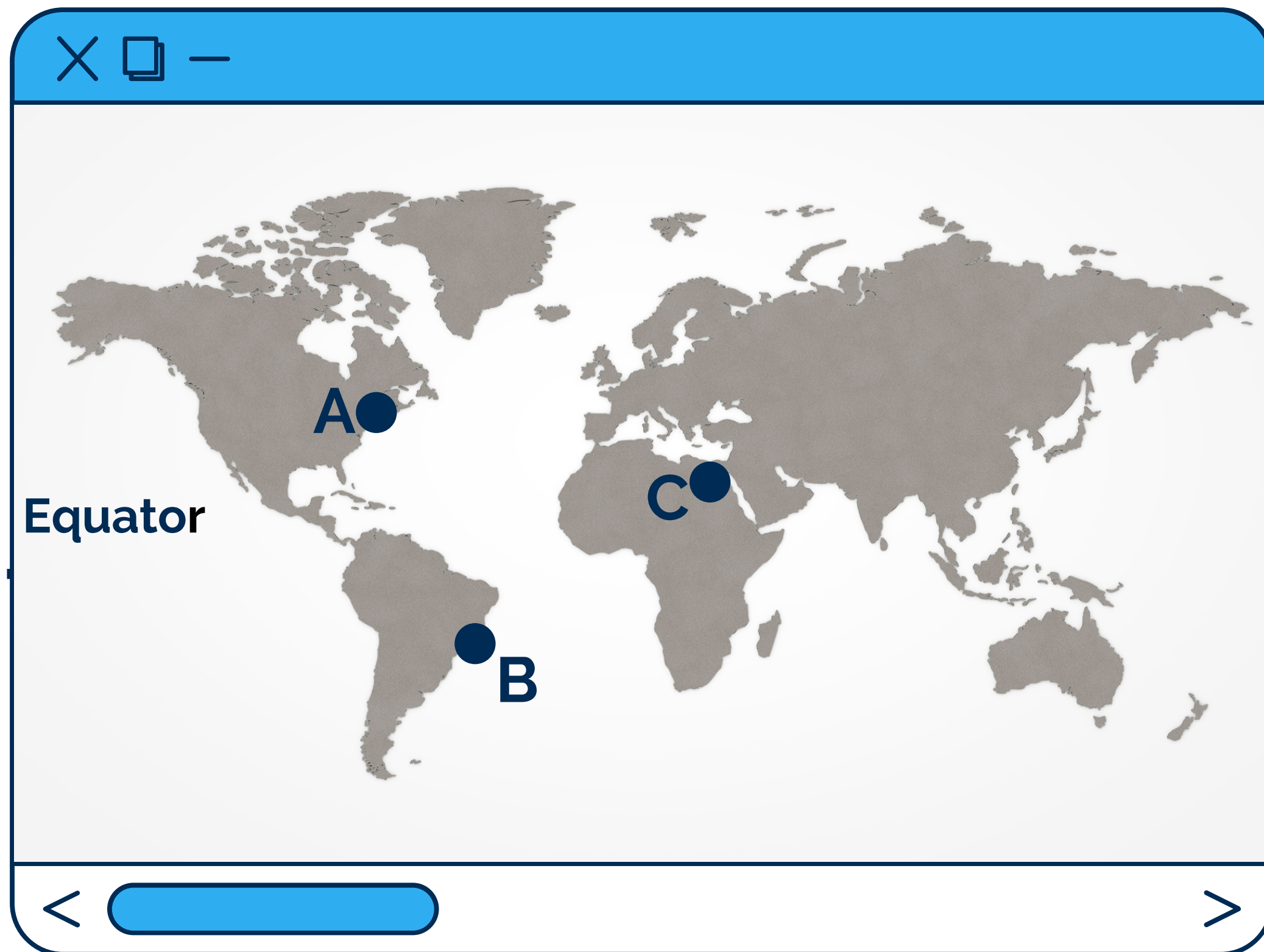
## How?

To do this, it needs to be organized by:

- sorting and counting
- creating graphs or tables
- calculating
- looking for patterns
- organizing facts

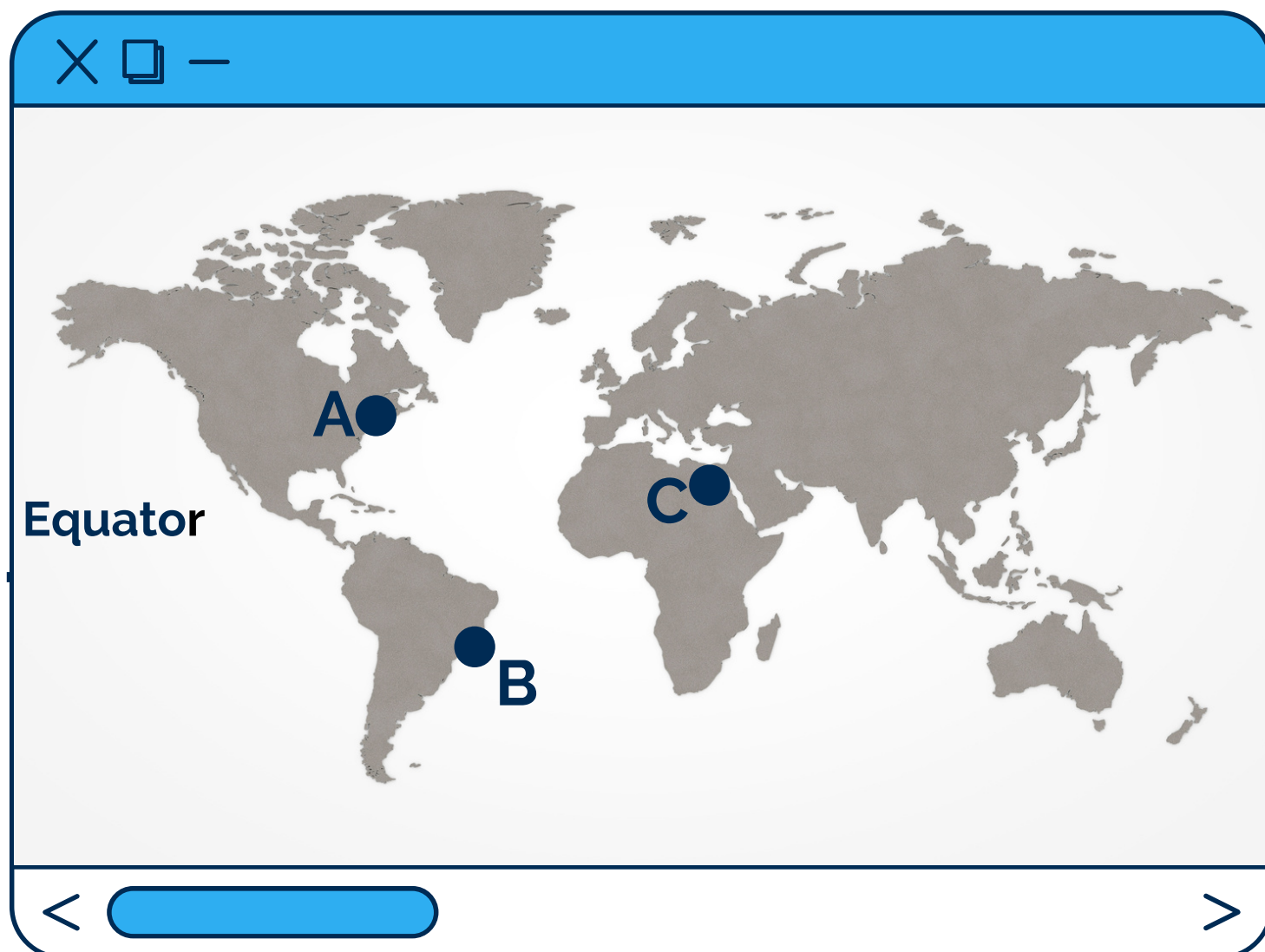


## What does this data tell you?

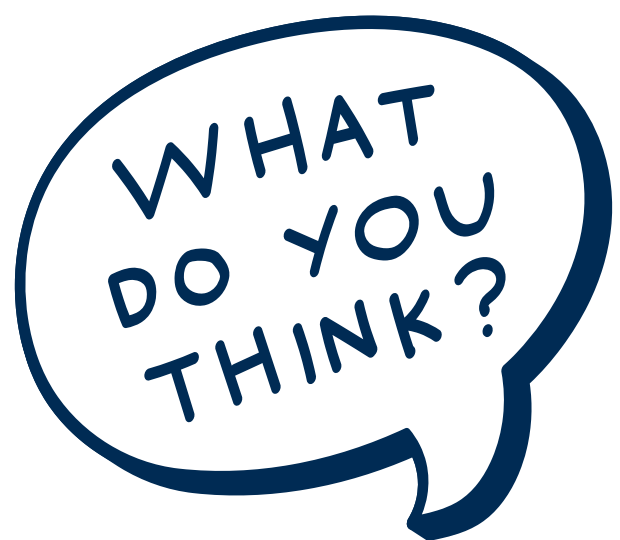


Map Label	City	Average Yearly Precipitation in Inches	Average Temperature Range °F
A	New York City, USA	42	31-72
B	Rio de Janeiro, Brazil	44	65-88
C	Cairo, Egypt	0.5	65-92

## What does this data tell you?



We can generate explanations about the **climate** of each of these cities with this information.



**What does the information provided tell about the climates of these cities?**

**What evidence can you provide to support your answer?**