



Test Ninjas

VOCABULARY STUDY SERIES

ACT VOCABULARY

ACT Science Vocabulary: Data & Graphs

20 focused words in Data & Graphs

20

UNIQUE WORDS

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CATEGORIES

ACT

EXAM FOCUS



About this study guide

This vocabulary guide was prepared and published by Test Ninjas as an independent study resource. It is designed to help students build the precise word knowledge needed for demanding academic reading and reasoning.

How to use this guide

Study in short, repeated sessions. Read each definition, say the word aloud, and use the example to understand how the word functions in context. Return to unfamiliar words until you can explain them without looking at the definition.

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001 quantitative *adjective***DATA & GRAPHS**

related to quantities (numbers and amounts) rather than qualities.

The researchers collected **quantitative** evidence, including temperature readings and precise measurements of growth, giving readers enough context to understand the word without consulting a glossary.

MEMORY CUE: Quantitative evidence appears as measurable numbers and amounts.

002 estimate *verb/noun***DATA & GRAPHS**

to roughly calculate or judge the value, number, or quantity of something (verb); a rough calculation or educated guess (noun).

Using the room's dimensions, Priya **estimated** how much paint the renovation would require, giving readers enough context to understand the word without consulting a glossary.

MEMORY CUE: An estimate uses a lightly marked number because it is a rough calculation.

003 approximate *adjective***DATA & GRAPHS**

close to an exact amount but not precise

The **approximate** cost of the project is two million dollars, making the degree of certainty clear from the surrounding circumstances and available evidence.

MEMORY CUE: An approximate measurement lands near the ruler's mark, but not exactly on it.

004 anomaly *noun***DATA & GRAPHS**

Something that deviates from what is standard, normal, or expected

The star's unusual brightness was dismissed as an **anomaly** until a second telescope confirmed the observation.

MEMORY CUE: One red apple in a perfect row of green apples is an anomaly: it breaks the expected pattern.

005 correlation *noun***DATA & GRAPHS**

A mutual relationship or connection between two or more things, especially a statistical one

The study found a strong **correlation** between childhood reading habits and academic performance in college.

MEMORY CUE: Correlation ties two changing measures together without proving one caused another.

006 extrapolation *noun***DATA & GRAPHS**

The act of extending known data or reasoning beyond what is directly observed or stated

The report's conclusions rely on an **extrapolation** from limited data that some experts consider overly optimistic.

MEMORY CUE: Extrapolation extends a known trend line beyond the observed data.

007 **discrepancy** *noun*

DATA & GRAPHS

A lack of agreement or consistency between facts or claims

The **discrepancy** between the official statistics and the independent survey raised questions about data collection methods.

MEMORY CUE: A discrepancy appears when two supposedly matching facts fail to line up.

008 **proportion** *noun*

DATA & GRAPHS

The relative size or share of a part compared to the whole

A disproportionately large **proportion** of the budget was allocated to defense, leaving education and healthcare underfunded.

MEMORY CUE: Proportion compares one part's size or share with the whole.

009 **quadrant** *noun*

DATA & GRAPHS

A section or quarter (here: a region of space)

The telescope was pointed toward a **quadrant** of the sky where astronomers expected to find the newly predicted comet.

MEMORY CUE: A quadrant is one quarter of a circle, plane, or region.

010 **scale** *noun/verb*

DATA & GRAPHS

the relative size or extent of something; a system of measurement

The disaster was on a **scale** never seen before, giving observers a clearer basis for judging its extent or relation to the larger whole.

MEMORY CUE: A scale compares relative size and marks measured positions along a system.

011 **indicator** *noun*

DATA & GRAPHS

a thing that indicates the state or level of something

Rising unemployment is often an **indicator** of economic trouble, shaping how confidently the people involved could reach a defensible conclusion.

MEMORY CUE: An indicator is the gauge needle that reveals a machine's current state or level.

012 **quantities** *noun*

DATA & GRAPHS

amounts or numbers of something

The recipe calls for large **quantities** of flour and sugar, giving observers a clearer basis for judging its extent or relation to the larger whole.

MEMORY CUE: Quantities are the measured amounts written beside groups of objects.

013 comparable *adjective***DATA & GRAPHS**

Similar in size, degree, or nature; able to be compared

No **comparable** study has been conducted on this scale, making the findings difficult to validate independently.

MEMORY CUE: Comparable items can stand side by side on the same scale because they are sufficiently similar.

014 median *noun***DATA & GRAPHS**

The middle value after a set of numbers has been arranged in order.

Because one executive earned exceptionally high pay, the **median** better represented the typical employee's salary.

MEMORY CUE: The median stands on the median strip, exactly in the middle of the ordered road.

015 variance *noun***DATA & GRAPHS**

A measure of how widely values in a dataset spread around their average.

Two stores had equal average sales, but greater **variance** made one store's weekly results far less predictable.

MEMORY CUE: Variance asks how far the data dots wander away from their central camp.

016 dataset *noun***DATA & GRAPHS**

A collection of related observations or measurements organized for analysis.

The **dataset** contains the temperature recorded at each depth during all twelve lake sampling trials.

MEMORY CUE: A dataset is a complete set of data points gathered into one organized container.

017 axis *noun***DATA & GRAPHS**

A reference line on a graph along which values or categories are positioned.

The vertical **axis** displays oxygen concentration, while the horizontal **axis** displays elapsed time in minutes.

MEMORY CUE: An axis is the numbered rail that gives graph points their position and meaning.

018 interval *noun***DATA & GRAPHS**

The amount of separation between neighboring values, measurements, or moments.

Researchers measured the solution at a five-minute **interval** so the graph used evenly spaced observations.

MEMORY CUE: An interval is the measured gap from one tick mark or observation to the next.

019 interpolate *verb***DATA & GRAPHS**

To estimate a value that lies between two known data points.

Students can **interpolate** the likely mass at six minutes by using the recorded values at five and seven minutes.

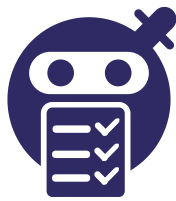
MEMORY CUE: To interpolate, place an estimated dot inside the gap between known dots.

020 scatterplot *noun***DATA & GRAPHS**

A graph of paired numerical values shown as separate points to reveal a possible relationship.

The **scatterplot** shows that plant height generally increases as the number of daylight hours increases.

MEMORY CUE: A scatterplot scatters paired data dots across a grid so their overall pattern becomes visible.



ACT VOCABULARY

Keep building your edge.

Vocabulary grows through repeated exposure and deliberate use.
Revisit this list, write with the words, and practice recognizing their
meaning in context.

More focused practice at test-ninjas.com