

Types of Relationships in Analogies

There are many ways in which a pair of words can be related. Sometimes the relationship is obvious as soon as you read the terms. Sometimes, however, you have to formulate a statement before the relationship becomes apparent.

The relationships found among items in an analogy can be grouped into **four broad categories**: semantic, classification, association, and logical/mathematical. Each of these groups contains several sub-classifications.

I. Semantic

This type of analogy can be thought of as involving definitions of the terms. Relationships of this type have to do with what a word stands for and how that word is linguistically connected to others. The words may be any part of speech.

A. **Synonym or Definition**—The terms have the same or similar meaning.

Teach : Instruct	Both words mean “to impart knowledge.”
Edge : Border	Both words refer to a boundary.
Empty : Vacuous	Both words mean “lacking in substance.”
Eire : Ireland	Both words are accepted names for the same country.

B. **Antonym or Contrast**—The terms have opposite meanings or are used to express unlike concepts.

Rarely : Frequently	The word <i>rarely</i> means “not often” or “infrequently.”
Order : Chaos	Chaos is a state of total disorder, the opposite of order.
Legalize : Outlaw	To outlaw something is not to legalize it but to make it illegal.

C. **Intensity**—One term expresses a greater size or degree of something than the other. This category can be difficult if you misinterpret the analogy as a simple synonym or antonym.

Joyful : Ecstatic	To be ecstatic is to be wildly and intensely joyful.
Slam : Close	To slam is to close forcefully and loudly.
Stream : Torrent	A torrent is a swift-flowing stream.

D. **Word Part/Meaning**—One term explains what the other term means.

–ism : Practice	One meaning of the suffix <i>–ism</i> is the practice of something; for example, criticism is the act or practice of criticizing.
Not : Un–	The prefix <i>un–</i> means “not”; for example, something unalterable cannot be changed.
Penta– : Five	The prefix <i>penta–</i> means five; for example, a pentagon is a five-sided polygon

II. Classification

The classification type of analogy concerns the hierarchy of words and concepts. For example, when you outline a topic, you list main headings, subtitles, and so on. In a classification analogy, one word could be a heading for the other word, or both words might fall under the same heading.

A. **Category**—One term is a subordinate or superordinate class of the other. In other words, one term is a type or example of the other one.

Species : Genus	A species is a subdivision of a genus.
Emotion : Love	Love is one type of emotion.
Measles : Disease	Measles is an example of a disease.

B. **Membership**—Both terms are parts of the same thing or members of a larger category.

Wheel : Fender	Both are parts of a car.
Fingers : Thumbs	Both are digits of the hand.
Love : Fear	Both are examples of emotions.

C. **Whole/Part**—One term is a part of another term.

Wheel : Car	A wheel is part of a car.
Galaxy : Star	A galaxy is made up of stars.
Year : Century	A century consists of one hundred years.

III. Association

The association type of analogy represents the largest group. This type deals with relationships between two distinct but related ideas. The terms are often nouns but may be any part of speech.

A. Object/Characteristic—One term is a characteristic, source, or location of another term.

1. One term is an attribute, characteristic, or description of the other:

Parrot : Beak	A parrot has a beak as its jaws.
Monster : Ferocious	A monster usually has a ferocious disposition.
Imaginary : Fable	A fable is a story about imaginary characters.

2. One term is an attribute that the other term lacks:

Hair : Bald	A person who has no hair is bald.
Inept : Skill	An inept person is lacking in skill.
Deliberate : Haste	A deliberate action does not involve haste.

3. One term is the source of the other or the material out of which the other is composed:

Book : Paper	A book is printed on paper.
Flour : Bread	Bread is made from flour.
Cable : Wire	A cable is composed of wires.

4. One term gives the location or setting of the other:

India : Rupee	A rupee is a denomination of the currency used in India.
Stomata : Leaf	Stomata are tiny pores in a leaf.
Parthenon : Athens	The Parthenon temple is in Athens, Greece.

B. Order—The terms are in a sequential or reciprocal relationship to one another.

1. The terms have a time or other sequential relationship, but one does not cause the other:

Dawn : Sunrise	The dawn occurs just before a sunrise.
7 : 11	These are consecutive prime numbers.
Alpha : Omega	These are the first and last letters of the Greek alphabet.

2. The terms have a reciprocal relationship so that one concept cannot exist without the other:

Aunt : Niece	A niece is related to an aunt through the same person; the niece's parent is the aunt's sibling.
Weight : Mass	On earth, anything with mass also has weight, due to the force of gravity acting upon it.
Object : Transitive	In a sentence, a transitive verb must have a direct object that it links to the subject.

3. One word is a grammatical transformation of the other:

Bring : Brought	The verb changes from present to past tense.
My : Mine	The possessive form changes from adjective to pronoun.
Datum : Data	The noun changes from singular to plural.

III. Association (continued)

C. **Agent/Object**—There are many possibilities within this group, all of which involve one term that causes, creates, provides, requires, uses, or in some other way relies on the other term. Some of the most common types of agent/object analogies include the following examples.

1. **Cause/Effect—One term causes the other:**

Rain : Flood	Excessive rain can cause a flood.
Hunger : Fasting	Fasting from food results in hunger.
Crime : Punishment	Punishment is a consequence of crime.

2. **Creator/Creation—One term creates the other:**

Robin : Nest	A robin builds a nest.
Suit : Tailor	A tailor makes a suit.
Homer : Iliad	Homer wrote the epic poem the <i>Iliad</i> .

3. **One term provides the other or makes it possible:**

Education : Teacher	A teacher provides education.
Food : Nutrition	Food provides the body with nutrition.
Postage : Mail	Postage covers the cost and enables mail to be delivered.

4. **One term represents the function or purpose of the other:**

Knife : Cut	A knife is used to cut something.
Sound : Audiometer	The purpose of an audiometer is to measure sound.
Salute : Respect	A salute shows respect.

5. **One term is a tool or object used by the other:**

Plumber : Wrench	A plumber uses a wrench to work on a pipe.
Seamstress : Needle	A seamstress uses a needle to pull thread through cloth.
Violinist : Bow	A violinist uses a bow to play a violin.

IV. Logical/Mathematical

This type of analogy includes logical or mathematical equations, numerical fractions, multiples, negation, or letter and sound patterns.

A. One term is a fraction or multiple of another:

11 : 121	121 is the square of 11.
Annual : Biennial	A biennial time period (two years) is twice as long as an annual time period (one year).
1/2 : 1/20	1/2 is ten times as much as 1/20.

B. The terms are related through some non-semantic similarity or change, such as rhyming, homophones, letter reversal, or other wordplay:

Emit : Time	The two words are spelled with the same letters in reverse order.
Bough : Bow	Two of the meanings of the word <i>bow</i> (“the front of a ship” and “to bend downward”) are pronounced the same as the word <i>bough</i> .
Sprung : Run	The word <i>run</i> is contained within the word <i>sprung</i> .