



Test Ninjas

VOCABULARY STUDY SERIES

ACT VOCABULARY

ACT Science Vocabulary: Physics, Energy & Motion

20 focused words in Physics, Energy & Motion

20

UNIQUE WORDS

1

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.

Copyright and permitted use

© 2026 Test Ninjas. All rights reserved. A lawful purchaser may print this document for personal study or for students in one class directly taught by that purchaser. Redistribution, resale, public posting, dataset extraction, and use for training or evaluating automated systems are prohibited without written permission.

Independent publication. SAT, ACT, GRE, GMAT, and LSAT are trademarks of their respective owners. Their owners are not affiliated with, and do not endorse, Test Ninjas.

001 gravitational *adjective*

PHYSICS, ENERGY & MOTION

Relating to the force of attraction between masses

The **gravitational** pull of Jupiter shields the inner planets from many asteroids that might otherwise strike Earth.

MEMORY CUE: Gravitational force pulls masses toward one another across space.

002 infrared *adjective*

PHYSICS, ENERGY & MOTION

Relating to electromagnetic radiation with wavelengths longer than visible light, perceived as heat

Infrared telescopes can detect heat signatures from celestial objects invisible to optical instruments.

MEMORY CUE: Infrared lies just beyond visible red and is commonly sensed as heat.

003 accelerated *adjective*

PHYSICS, ENERGY & MOTION

happening at a faster rate

The **accelerated** program finished early, helping observers compare the actual pace with what they had originally expected.

MEMORY CUE: An accelerated arrow climbs from normal speed to a faster rate.

004 amplify *verb*

PHYSICS, ENERGY & MOTION

to increase in strength, size, or importance

The microphone was used to **amplify** the speaker's voice, helping the audience recognize how much of the larger subject it represented.

MEMORY CUE: An amplifier turns a quiet note into a room-shaking sound, increasing its strength.

005 static *adjective*

PHYSICS, ENERGY & MOTION

not moving or changing; stationary; can also mean noise in a radio/TV.

Wages remained **static** for years, clarifying the kind and degree of activity taking place in the situation.

MEMORY CUE: A static object remains frozen; radio static crackles without a clear signal.

006 oscillate *verb*

PHYSICS, ENERGY & MOTION

To move or swing back and forth; to waver between extremes

Public opinion seemed to **oscillate** between support for and opposition to the policy.

MEMORY CUE: A pendulum oscillates in a regular back-and-forth path.

007 attenuation *noun***PHYSICS, ENERGY & MOTION**

The process of reducing the force, effect, or value of something; weakening

The **attenuation** of the radio signal at greater distances limited the probe's ability to transmit data back to Earth.

MEMORY CUE: Attenuation turns a strong signal's thick line progressively thinner and weaker.

008 magnify *verb***PHYSICS, ENERGY & MOTION**

To increase the apparent size or importance of

The media's tendency to **magnify** minor disagreements into full-blown crises distorts the public's understanding of politics.

MEMORY CUE: A magnifying lens makes an object appear larger and more important.

009 induced *adjective/verb***PHYSICS, ENERGY & MOTION**

Brought about or stimulated; (in this context) traffic generated as a result of new road capacity

The new highway lanes, rather than reducing congestion, **induced** additional traffic that quickly filled the expanded road.

MEMORY CUE: An induced effect is brought about by a particular stimulus or change.

010 propagate *verb***PHYSICS, ENERGY & MOTION**

to spread and promote widely

The internet helped **propagate** the idea, setting in motion a chain of events that changed what happened afterward.

MEMORY CUE: Propagate an idea by sending copies outward through many channels.

011 inhibit *verb***PHYSICS, ENERGY & MOTION**

to hinder or restrain an action

Fear can **inhibit** creative thinking, setting in motion a chain of events that changed what happened afterward.

MEMORY CUE: A tight brake inhibits motion by restraining it.

012 intensification *noun***PHYSICS, ENERGY & MOTION**

The act of making something stronger or more extreme

The **intensification** of the conflict along the border prompted the United Nations to deploy additional peacekeepers.

MEMORY CUE: Intensification turns the volume upward, making something stronger or more extreme.

013 **parallel** *adjective*

PHYSICS, ENERGY & MOTION

similar or corresponding

The **parallel** stories shared common themes, giving observers a more precise basis for comparing the two subjects.

MEMORY CUE: Parallel lines travel side by side like similar, corresponding ideas.

014 **potent** *adjective*

PHYSICS, ENERGY & MOTION

powerful; having a strong effect.

Even a small dose of the **potent** medication produced a measurable change in heart rate.

MEMORY CUE: A potent drop creates a powerful effect far larger than itself.

015 **stimulated** *verb*

PHYSICS, ENERGY & MOTION

encouraged or aroused interest or enthusiasm;
increased activity in

The discussion **stimulated** new ideas among the team members, producing consequences that became increasingly apparent as the situation continued to develop.

MEMORY CUE: A spark stimulated the engine, raising both activity and interest.

016 **velocity** *noun*

PHYSICS, ENERGY & MOTION

The rate at which an object's position changes in a specified direction.

The cart's **velocity** became negative after it reversed direction and rolled back toward the sensor.

MEMORY CUE: Velocity is speed wearing a direction arrow; both size and direction matter.

017 **acceleration** *noun*

PHYSICS, ENERGY & MOTION

The rate at which velocity changes over time.

The falling object's **acceleration** remained nearly constant while its downward velocity increased each second.

MEMORY CUE: Acceleration tracks how quickly the velocity arrow changes length or direction.

018 **force** *noun*

PHYSICS, ENERGY & MOTION

A push or pull that can change an object's motion or shape.

A greater net **force** produced a larger acceleration when the cart's mass remained unchanged.

MEMORY CUE: Picture a hand pushing an arrow into an object; that push is force.

019 momentum *noun***PHYSICS, ENERGY & MOTION**

A quantity of motion equal to an object's mass multiplied by its velocity.

The heavier cart had greater **momentum** than the lighter cart moving at the same velocity.

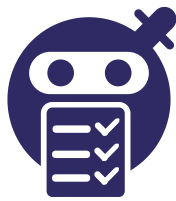
MEMORY CUE: Momentum combines moving speed with mass, so a heavy fast object is hardest to stop.

020 wavelength *noun***PHYSICS, ENERGY & MOTION**

The distance between matching points on successive cycles of a wave.

The diagram shows **wavelength** as the horizontal distance from one wave crest to the next.

MEMORY CUE: Wavelength is the ruler laid from one wave crest to its matching neighbor.



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