

UNIT 1: IS THERE ONLY ONE KIND OF ENERGY?

Lesson 1: Why do astronauts seem to float?

A. Draw a line to match the sentence halves (page 105)

Energy is	the ability to do work or change the properties of matter.
Matter is	nature an extremely long time to create.
Non-renewable sources of energy take	available in nature in unlimited quantities.
Renewable sources of energy are	everything that occupies space and that has mass.

B. Grab the words to complete sentences (page 106)

gravity	gravitational	potential	chemical	kinetic
---------	---------------	-----------	----------	---------

1. Energy of motion is called_____.
2. Energy present in matter which results from its formation or position is called _____ energy.
3. One form of potential energy is _____ which energy is found in batteries, petroleum or food.
4. Energy present in matter that depends of the mass of the object and its position, or height is called _____ potential energy
5. The force of attraction that pulls two objects toward one another is called_____

1. Gravitational force _____ when the distance between objects increases.
increases decreases
2. The gravitational force is _____ the more mass an object has.
lower greater
3. _____ is measured in kilograms.
Mass Weight
4. Gravity acceleration on Earth is always _____ meters per second squared x mass in kilograms.
9.8 0.17
5. The _____ of an astronaut is the same on the Moon and on Earth.
mass weight
6. The _____ of an astronaut changes if the gravitational forces changes.
mass weight

