

# Scientific Concept Scavenger Hunt

Test your middle schooler's science knowledge with a science scavenger hunt! The purpose of this game is to test your child's understanding of science terms and apply these terms to real world objects.

## What You Need:

- A copy of the chart below

## What You Do:

1. No preparation required! Simply use the chart below as a checklist. Read your child the challenge listed in the first column. Ask him if he understands the term raised in the challenge. If he say yes, ask him to explain the term to you. If not, use the definition in the second column to help him develop a clear understanding of the science concept.
2. Once your explorer masters the science concept at hand, ask him to find something in and/or around your home that is an example of the science term. If he has trouble identifying something that represents the science concept, look for one of the items listed in the third column. Examine the item together and discuss how and why it is an example of the stated concept. Then challenge him once again to find an item that represents the concept. The great thing is there can be any number of items that represent each task!
3. Can your child find one item for each task? Two? Three?
4. Take the challenge to the next level and create your own scavenger hunt. Have your discoverer develop his own science scavenger hunt and look for objects together. Don't know where to start? Have your child use his current science text book's glossary and search for terms in the book.
5. Take the scavenger hunt on the road. Look for items that employ the science concepts when you are out and about and not just at home! Remember, science is all around us!



## SCIENCE SCAVENGER HUNT

<i>Find an example of...</i>	<i>Definition</i>	<i>Examples</i>
a pure element	material consisting of only one type of atom (as listed on periodic table)	carbon – diamond in a ring or graphite in a pencil
a colloid	a mixture of tiny substances that are dispersed in one another but do not settle out	milk (curds & whey), Jello (protein & water), fog (water & air)
an acid	substance that produces or donates hydrogen ions in a solution	vinegar, citrus fruit
a chemical change	a change that occurs when the atoms of a substance are rearranged to make a new substance	vinegar mixed with baking soda, baking a cake, rusting nail

condensation	matter phase change of a gas to a liquid	drops of water on outside of a cold glass, dew drops on grass on a cool morning
a first class lever	simple machine that has a rigid arm that turns around a point (fulcrum), first class levers have the fulcrum in the middle of the resistance and effort forces	scissors, hammer, pliers
kinetic energy	energy of motion	anything moving – person walking, waving hand, running water
Newton's First Law of Motion	an object at rest stays at rest and an object in motion stay in motion, unless acted upon by an outside force (inertia)	a book on a table does not move unless something (like a hand) moves it, a car breaks suddenly and its passengers jerk forward
friction	resisting force that opposes motion of an object as it passes by another object	tires breaking against a road, rubbing hands together, shoe bottoms against floor
the Doppler effect	change in frequency of wave motion due to the motion of the wave source or the receiver	vehicle driving down road (listen how the sound changes as the car drives closer then passes by)
an arthropod	animals without vertebra that have jointed legs and segmented bodies	spider, ant, crab
flora	plant life of a given place or time	any plant – fern, rose bush, grass
weathering	the break-down of earth's material through chemical and mechanical means	broken rocks, pot holes that form in road during winter, marble stones damaged by acid rain
a cumulus cloud	puffy, white to grey clouds that can develop vertically indicating approaching thunderstorms	on a calm day look for puffy, cotton ball, like clouds; on a day of approaching storms look for tall, towering clouds

a mineral	natural, inorganic solid, with a set chemical composition and crystalline structure	quartz (various forms – amethyst stone, white/clear rock), salt
a constellation	groups of stars that form patterns in the night sky	Ursa Major (big dipper or bear) Andromeda, Orion (the hunter)