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# Substances and Mixtures: Mix THIS! Quiz \#1 

| Multiple Choice | (1 Mark Each) |
| :---: | :---: |
| Identify the letter of | he statement or and |

1. We are prepping for our series of science labs focusing on Substances. Your first challenge is to work together in a team to produce the $\qquad$ - in this case: lemonade!
a. perfect substance
c. precise mixture
b. pure substance
d. perfect mixture
2. Your knowledge of the $\qquad$ will come in handy in the next few weeks.
a. particle theory of matter
c. homogeneous mixtures
b. substances and mixtures
d. heterogeneous mixtures
3. Elements are the $\qquad$ that everything on earth is made of, and there are just over
$\qquad$
a. building blocks, one million
c. basic materials, one hundred
b. basic substances, three hundred (and
d. matter, ten thousands not starring Gerard Butler)
4. The three main kinds of combinations are...
a. solutions, elements, mixtures
c. heterogeneous, homogeneous, and compounds
b. mixtures, solutions, and compounds
d. all of the above
$\qquad$ 5. A shovelful of soil might contain some top soil, some clay, maybe a little sand, a few bugs, maybe some really tiny microorganisms, maybe a worm, maybe some rotting plant roots, and maybe some more things. Soil is a...
a. mixture
c. compound
b. solution
d. really, really dirty
5. Each shovelful of soil is probably a little different from the next one. Maybe one has more sand, and the other has more clay. Maybe one shovelful has two worms! Soil can be separated into its
$\qquad$ parts
a. many
c. different
b. subtle
d. slightly different
6. "A mixture is not the same from one sample to the next, and a mixture can be separated into its parts."
a. Strongly agree
c. Slightly disagree
b. Somewhat agree
d. Strongly disagree
7. Salt water is a $\qquad$ . A glassful of salt water contains both $\qquad$ and
a. mixture, salt, water
c. compound, salt, gasoline
b. solvent, air, something really funky like d. solution, salt, water
8. Water is a $\qquad$ .
a. compound
c. solution
b. mixture
d. solvent
$\qquad$ 10. Water is not much like either hydrogen or oxygen; it is a totally different material, created when hydrogen and oxygen combine $\qquad$ .
a. chemically
c. excitedly
b. radically
d. mechanically
9. "Water can be separated by a physical means. It would require very simple change to separate water back into its parts."
a. Somewhat true
c. Somewhat untrue
b. Totally false
d. Very, very true.
10. These are characteristics of $\qquad$ : they are made of $\qquad$ that are
$\qquad$ combined, they have the same $\qquad$ of their elements throughout the material, they cannot be $\qquad$ except by a $\qquad$ change, and they may not be at all like the elements that they were $\qquad$ from.
a. elements, compounds, chemically,
c. compounds, elements, chemically, proportion, separated, chemical, made
proportion, separated, chemical, made
b. chemicals,, elements, compounds,
d. (Oh wow. I should have studied.) proportion, separated, mechanical, made
11. Most solutions are liquids, but not all of them. What is an example of a solution, but is not a liquid?
a. cookie dough
c. a person's brain after a tough exam
b. jello
d. frozen lemonade
12. Sugar is a compound. What's its chemical composition?.
a. carbon, hydrogen, and oxygen
c. oxygen, hydrogen, and sodium
b. sugar, hydrogen, and oxygen
d. two parts carbon, hydrogen, and oxygen

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Answer Section

MULTIPLE CHOICE

1. ANS: D
2. ANS: A
3. ANS: C
4. ANS: B
5. ANS: A
6. ANS: C
7. ANS: A
8. ANS: D
9. ANS: A
10. ANS: A
11. ANS: B
12. ANS: C
13. ANS: B
14. ANS: A
