CLASSIFICATION OF MATTER WORKSHEET

Pure substances vs. mixtures

A. Classify the following as pure substances (element or compound) or mixtures.

1. Sodium
2. Water
3. Soil
4. Coffee
5. Oxygen
6. Carbon dioxide
7. Cake batter
8. Air
9. Chicken noodle soup
10. Iron
11. Salt water
12. Eggs
13. Blood
14. Nail polish

Homogeneous vs. heterogeneous matter

B. Classify the following types of matter as either homogeneous or heterogeneous.

1. Carbonated soft drink
2. Chocolate chip ice cream
3. Italian salad dressing
4. Corn syrup
5. Soil
6. Aluminum foil
7. Black coffee
8. Sugar water
9. Air
10. Paint
11. Rubbing alcohol
12. Full fat milk
13. Beach sand
14. Pure air
15. Chunky spaghetti sauce
16. Bubble tea

C. Choose the correct answer.

1. The smallest unit of all chemical elements is atom/substance.
2. A mixture is/is not a chemical combining of substances.
3. An element can/cannot be broken down into a simpler substance.
4. Iron sulphate is an element/compound.
5. In a mixture, the substances lose/retain their identities.

D. From the following list of substances, circle the ones that are ELEMENTS.

Silver carbon	Carbon dioxide	Alcohol chromium
Water	Hydrogen	Carbon nitrogen
Oxygen	Gold	Sugar
Salt	Air	Sulfur
Magnesium	Nickel	Aluminum

LIVEWORKSHEETS

E. Classify each of the pictures below by placing the correct label in the blanks below:

A = Element

B = Compound

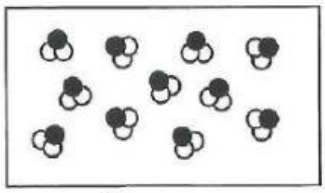
C = Mixture of elements

D = Mixture of compounds

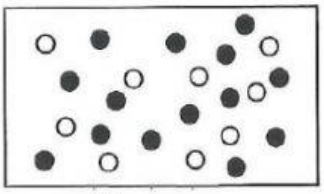
E = Mixture of elements and compound

Each circle represents an atom and each different color represents a different kind of atom.

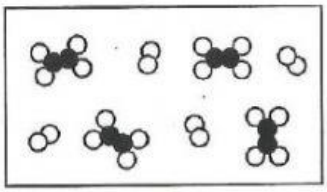
If two atoms are touching then they are bonded together.



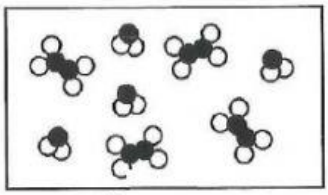
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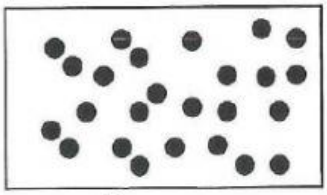
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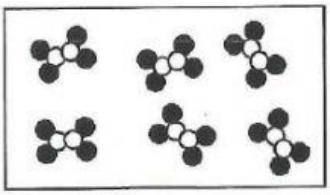
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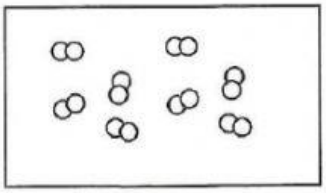
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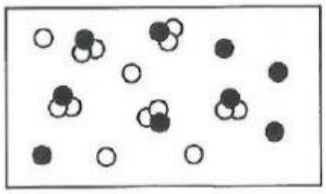
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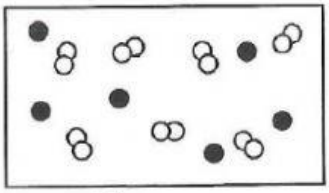
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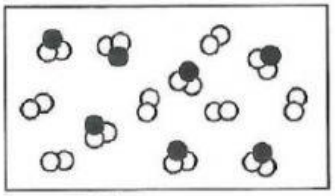
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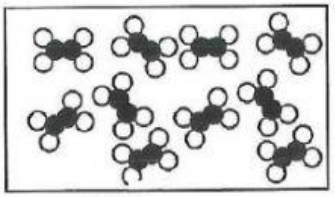
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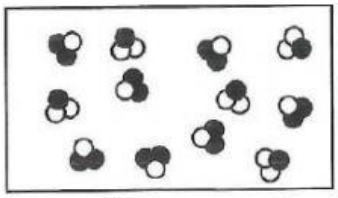
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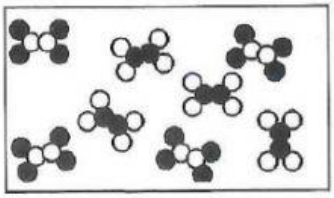
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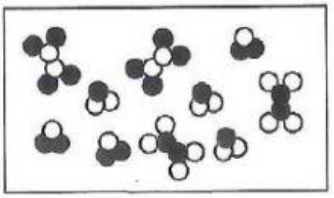
11) _____



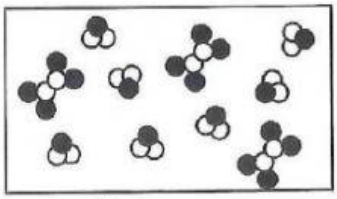
12) _____



13) _____



14) _____



15) _____

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