

# ATOMS, MOLECULES, COMPOUNDS & MIXTURES READING

[https://education.jlab.org/qa/atoms\\_and\\_elements.html](https://education.jlab.org/qa/atoms_and_elements.html)

Directions:

- 1) Read the two pages below from my website (see heading pictures for what pages to read).
- 2) Answer the questions based on the page of the website shown above.

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## Questions and Answers

← Previous Question (What is an element? How many elements are there?)      Questions and Answers Main Index      Next Question → (What are atoms, elements, compounds and mixtures?)

### What is the difference between atoms and elements?

Get ready for an imperfect analogy.

1) Different types of ice cream are like (circle):    atoms    or    elements

2) Scoops of ice cream are like (circle):    atoms    or    elements

3)

\_\_\_\_\_ 1. element

a.) the smallest amount of an element

\_\_\_\_\_ 2. atom

b.) two or more atoms that are chemically joined together (H<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub>O, etc...)

\_\_\_\_\_ 3. compound

c.) a basic substance that can't be simplified (hydrogen, oxygen, gold, etc...)

\_\_\_\_\_ 4. molecules

d.) a molecule that contains more than one element (H<sub>2</sub>O, C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>, etc...)

## Questions and Answers

← Previous Question  
(What is the difference between atoms and elements?)

Questions and Answers Main Index

Next Question →  
(What is a mixture?)

What is the simplest way of explaining what atoms, elements, compounds and mixtures are?

4) The smallest parts of matter are called \_\_\_\_\_.

5) A \_\_\_\_\_ is a pure substance that is made only from one kind of atom.

6) A \_\_\_\_\_ is a substance made by combining two or more different types of elements that have been chemically joined.

*Examples of these include:*

\_\_\_\_\_ (\_\_\_\_\_), \_\_\_\_\_ (\_\_\_\_\_),

\_\_\_\_\_ (\_\_\_\_\_), & \_\_\_\_\_ (\_\_\_\_\_),

7) A \_\_\_\_\_ is a substance made by combining two or more different materials in such a way that no chemical reaction occurs.

*Examples of these include:*

\_\_\_\_\_, \_\_\_\_\_, & \_\_\_\_\_