

## Atoms, molecules and compounds quiz

This resource accompanies the article **The breath of life** in *Education in Chemistry* which can be viewed at: <https://rsc.li/3TuTVuC>. Use this resource to strengthen your students' understanding of the components of our atmosphere.

### Learning objectives

- 1 Identify atoms, molecules, elements and compounds using particle diagrams.
- 2 Use particle diagrams to classify a substance as an element or compound and as molecules or atoms.

### How to use

Using this quiz, learners have an opportunity to apply their knowledge of atoms, molecules, elements and compounds to solidify their understanding. This resource can be used after completing the topic for retrieval practice and as revision before an assessment.

You can display the questions in the PowerPoint on a screen or copy and paste them into an interactive quizzing tool. You may also want to print the student sheet for pupils to work at their own pace. Mini whiteboards would be an ideal way to give quick whole class feedback and self-assessment will allow pupils to reflect on their understanding.

Differentiation could also be achieved through teacher questioning via modelling. You could use Molymod or plasticine molecules as support materials for classes that need a further visual aid.

### Answers

#### 1. (Slide 4)

- |             |             |             |             |
|-------------|-------------|-------------|-------------|
| a. Molecule | b. Molecule | c. Molecule | d. Molecule |
| e. Molecule | f. Molecule | g. Atom     | h. Molecule |
| i. Atom     | j. Molecule | k. Molecule | l. Molecule |

#### 2. (Slide 5)

- |                   |                   |                   |                   |
|-------------------|-------------------|-------------------|-------------------|
| a. Element        | b. Not an element | c. Element        | d. Not an element |
| e. Not an element | f. Element        | g. Element        | h. Element        |
| i. Element        | j. Not an element | k. Not an element | l. Element        |

#### 3. (Slide 6)

- |             |             |             |             |
|-------------|-------------|-------------|-------------|
| a. Both     | b. Molecule | c. Both     | d. Molecule |
| e. Molecule | f. Both     | g. Element  | h. Both     |
| i. Element  | j. Molecule | k. Molecule | l. Both     |

4. (Slide 7)
- |             |             |             |             |
|-------------|-------------|-------------|-------------|
| a. Molecule | b. Both     | c. Molecule | d. Both     |
| e. Both     | f. Molecule | g. Molecule | h. Molecule |
| i. Both     | j. Both     | k. Both     | l. Molecule |
5. (Slide 9)
- |                  |                  |                  |                 |
|------------------|------------------|------------------|-----------------|
| a. Trace amounts | b. Trace amounts | c. 78%           | d. Less than 1% |
| e. Trace amounts | f. Not found     | g. Trace amounts | h. 21%          |
| i. Trace amounts | j. Trace amounts | k. Trace amounts | l. Not found    |