



How can chemists classify and separate matter?

Owning my learning: The learning intentions or goals for the unit are listed below. Completing this table can help you determine what you know and the level to which you know it. Place a check mark in the box that best describes your learning level at the beginning of the learning and after we have learned together. The columns are numbered 1 to 4 to indicate the following levels of proficiency:

- | | | | |
|----------------|-----------------------------|--------------|-------------------------|
| 1 Emerging | “I’m just getting started.” | 2 Developing | “I get some of it.” |
| 3 Accomplished | “I get it.” | 4 Extending | “I can teach a friend.” |

Be honest with yourself as you complete the checklist to filter what you know from what you don’t know and remember to study efficiently and effectively, study what you don’t know.

I Can Define:

- | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

System, phase, element, atom, molecule, ion, particle, compound

I Can Classify Matter:

- | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

As homogeneous or heterogeneous

As a pure substance or mixture

As an element, compound, solution, mechanical mixture or suspension

From a diagram of its components

I Can Identify:

- | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Solvent and solute

I Can Design/Conduct Experiments to:

- | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Separate mixtures by using property differences

I Can Explain:

- | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Filtration, liquid/liquid extraction, how a centrifuge works, distillation, paper chromatography

I Can Determine:

- | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

The R_f from experimental data

