

Key Topics and Vocabulary

- Elements, compounds, and mixtures
- Homogeneous and heterogeneous mixtures
- Phases/states of matter: solids, liquids, and gases
- Particle diagrams
- Physical separations
 - filtration
 - distillation
 - chromatography

Key Scientific Skills

- Modeling using diagrams and formulas
- Planning and carrying out investigations
- Supporting claims with evidence

Cross-Cutting Concepts

- Patterns
- System models
- Structure and function

Insights Unit 1

Vocabulary Glossary

matter	anything that takes up space and has mass (atoms make it up)
pure substance	every particle is identical
mixture	diff. particles mixed together
element	every <u>atom</u> is the same
compound ex: CO_2 H_2O	made up of 2 or more atoms
heterogeneous mixture	particles are unevenly mixed
homogeneous mixture	particles are evenly mixed
phases/states of matter	solids, liquids, gases
filtration	uses differences in size and ability to dissolve to separate a mixture
distillation	uses differences in boiling point to separate a mixture
chromatography	uses differences in rates of adsorption to separate a mixture