

# Nancy Larson® Science 5 Table of Contents

## A: Exploring the Universe

- 1 Identifying tools astronomers use to explore the universe
- 2 Constructing a Galilean refracting telescope
- 3 Describing constellations and asterisms  
Locating the asterisms the Big Dipper and the Little Dipper on a sky map
- 4 Identifying factors that determine which stars and constellations we see  
Locating constellations on sky maps
- 5 Describing and classifying galaxies  
Describing the Milky Way Galaxy
- 6 Identifying the stages in the life cycles of stars
- 7 Describing the life cycles of stars
- 8 Review 1: Astronomy—Exploring the Universe
- 9 Assessment 1: Astronomy—Exploring the Universe
- 10 Identifying characteristics of our solar system  
Identifying characteristics of our Sun
- 11 Describing the planets in our solar system
- 12 Comparing and contrasting the planets
- 13 Identifying characteristics of asteroids, meteoroids, dwarf planets, and comets
- 14 Describing the two motions of Earth  
Identifying the cause of day and night on Earth  
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- 15 Identifying the causes of the Earth's seasons
- 16 Comparing the number of hours of daylight at different times of the year  
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- 17 Identifying the phases of the Earth's Moon
- 18 Identifying how solar and lunar eclipses occur
- 19 Review 2: Astronomy—Exploring Our Solar System
- 20 Assessment 2: Astronomy—Exploring Our Solar System

## B: Examining the Structure of Matter

- 21 Identifying elements that make up matter  
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- 22 Classifying elements as metals, non-metals, or metalloids  
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- 23 Describing the structure of an atom
- 24 Identifying valence electrons  
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- 25 Describing compounds  
Identifying organic and inorganic compounds  
Identifying elements in a chemical formula
- 26 Identifying what happens during chemical bonding  
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- 27 Describing ionic bonding
- 28 Describing covalent bonding
- 29 Identifying the structural formula of a molecule
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- 31 Assessment 3: Chemistry—Examining the Structure of Matter

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- 32 Classifying matter as a pure substance or a mixture  
Identifying mixtures as homogeneous or heterogeneous
- 33 Classifying mixtures as solutions, colloids, or suspensions
- 34 Identifying characteristics of solids, liquids, gases, and plasmas
- 35 Identifying phase changes when heat is added
- 36 Identifying phase changes when heat is removed
- 37 Observing and describing cohesion, surface tension, and adhesion
- 38 Observing and identifying physical changes
- 39 Identifying physical properties of matter
- 40 Comparing the viscosity of liquids
- 41 Conducting a viscosity experiment
- 42 Review 4: Chemistry—Investigating Physical Properties of Matter
- 43 Assessment 4: Chemistry—Investigating Physical Properties of Matter
- 44 Measuring temperature
- 45 Measuring the mass of solids and liquids
- 46 Measuring the volume of liquids and solids
- 47 Measuring the volume of rectangular solids
- 48 Describing density  
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- 49 Comparing the density of solids and liquids
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- 51 Observing and describing chemical reactions: combustion, synthesis, and decomposition
- 52 Describing chemical reactions: neutralization  
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- 54 Assessment 5: Chemistry—Investigating Matter and Its Interactions

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- 56 Describing the layers of the geosphere  
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- 57 Describing and observing processes that change the geosphere: weathering, erosion, and deposition
- 58 Describing how erosion and deposition change the geosphere  
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- 59 Classifying rocks  
Describing the rock cycle  
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- 60 Describing the layers of the atmosphere  
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- 61 Describing weather conditions  
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- 62 Describing the hydrosphere  
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- 64 Describing climate  
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- 65 Describing terrestrial biomes
- 66 Describing freshwater and marine regions of the aquatic biome
- 67 Describing the effects of forests on the Earth's systems  
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- 69 Assessment 6: Environmental Science—Examining the Interactions of the Earth's Systems

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- 73 Describing magnetism and magnetic fields
- 74 Describing the effect a magnet has on other substances  
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- 76 Describing contact forces involving solids
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- 83 Describing machines  
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- 84 Identifying and describing a wedge, screw, and wheel and axle
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- 95 Assessment 8: Engineering—Investigating Tools and Machines