

Dolton School District 148
Strategic Planning – Science - Grades 7-8

Weeks of Instruction	Science Standards GR 7	Science Standards GR 8	Daily Review, Instruction & Homework	Evidence of Success in Achieving Targeted Skills
<p>Cycle 1</p> <p>August 16-20 August 23-27 August 30-Sept. 3 September 6-10 September 13-17 September 20-24 September 27-Oct. 1</p> <p style="text-align: center;">30 ½ days</p>	<p>11.7.01 Follow the scientific method 11.7.02 Distinguish between the phases of the scientific method. 11.7.04 Define a variable as some factor which changes in different phases of an experiment. Define constant as something kept the same in every phase of the experiment. 11.7.06 Analyze patterns in data from an experiment to determine whether the information gathered helps to answer a given question or hypothesis. 13.7.01 Identify potential hazards and ways to reduce such hazards. 13.7.03 Indicate that repeatability of results is necessary. 13.7.04 Understand that one set of data is not sufficient evidence for making a generalization. 13.7.05 Standard procedure for measurement and presentation of data. 13.7.06 Important social decisions are made on the basis of risk/benefit analysis.</p>	<p>11.7.01 Follow the scientific method 11.7.02 Distinguish between the phases of the scientific method. 11.7.04 Define a variable as some factor which changes in different phases of an experiment. Define constant as something kept the same in every phase of the experiment. 11.7.06 Analyze patterns in data from an experiment to determine whether the information gathered helps to answer a given question or hypothesis. 13.7.01 Identify potential hazards and ways to reduce such hazards. 13.7.03 Indicate that repeatability of results is necessary. 13.7.04 Understand that one set of data is not sufficient evidence for making a generalization. 13.7.05 Standard procedure for measurement and presentation of data. 13.7.06 Important social decisions are made on the basis of risk/benefit analysis.</p>		
<p>Cycle 2</p> <p>October 4-8 October 11-15 October 18-22 October 25-29</p> <p style="text-align: center;">18 ½ days</p>	<p>12.7.63 Force tends to accelerate an object. Force can speed up, slow down or change the direction of an object. 12.7.64 Newton's Laws of Motion 12.7.65 Concept of work 12.7.66 Density is mass per volume. Less dense bodies have greater buoyancy. 12.7.67 Gravitational force decreases as objects get farther apart and gravitational force decreases as their masses decrease. 12.7.68 Understand and calculate average speed given the distance traveled and the time taken. 12.7.69 Distinguish between mass and weight. 12.7.39 Define element. 12.7.41 Identify simple compounds 12.7.42 Define atom as the smallest part of an element that has the properties of that element. 12.7.43 Electron, protons and neutrons</p>	<p>12.7.63 Force tends to accelerate an object. Force can speed up, slow down or change the direction of an object. 12.7.64 Newton's Laws of Motion 12.7.65 Concept of work 12.7.66 Density is mass per volume. Less dense bodies have greater buoyancy. 12.7.67 Gravitational force decreases as objects get farther apart and gravitational force decreases as their masses decrease. 12.7.68 Understand and calculate average speed given the distance traveled and the time taken. 12.7.69 Distinguish between mass and weight.</p>		
<p>Cycle 3</p> <p>November 1-5 November 8-12 November 15-19 November 22-24 Nov. 29 – Dec. 3 December 6-10 December 13-17</p> <p style="text-align: center;">28 ½ days</p>	<p>12.7.33 Physical and Chemical change 12.7.34 Properties of matter 12.7.35 Phases of matter 12.7.45 Moons and planets do not have their own light. 12.7.46 Solar eclipse, lunar eclipse and phases of the moon 12.7.47 Order and size of the planets 12.7.48 Earth's rotation, tilt of the earth, the seasons 12.7.70 Earthquakes, volcanic eruptions and mountain building result from</p>	<p>12.7.49 Forms of energy: heat, light, sound, chemical, mechanical, solar, nuclear, and electromagnetic</p>		

	<p>plate motions in the Earth.</p> <p>12.7.71 Landforms result from constructive and destructive forces.</p> <p>12.7.72 Soil consists of weathered rocks and decomposed organic matter.</p> <p>12.7.77 Layers of the Earth</p> <p>12.7.78 Rock Cycle</p> <p>12.7.79 Plate Tectonics</p>			
<p>Cycle 4</p> <p>January 3-7 January 10-14 January 17-21 January 24-28</p> <p>19 ½ days</p>	<p>12.7.02 All living things are composed of cells, different tissues have different cells with specific functions, and levels of organization.</p> <p>cells-tissues-organs-organ systems</p> <p>12.7.03 Identify differences between plant and animal cells.</p> <p>12.7.04 Organisms are unicellular and multi-cellular organisms.</p> <p>12.7.05 The nucleus of the cell contains the genetic information for the plant or animal.</p> <p>12.7.07 Process of meiosis</p>	<p>12.7.33 Physical and chemical change</p> <p>12.7.34 Properties of matter</p> <p>12.7.35 Phases of matter</p> <p>12.7.36 Melting point, boiling point, freezing point, evaporation, condensation, sublimation</p> <p>12.7.39 Elements</p>		
<p>Cycle 5</p> <p>January 31 – February 4 February 7-11 February 14-18 February 21-25</p> <p>18 ½ days</p>	<p>12.7.01 Scientists classify plants and animals using a dichotomous key</p>	<p>12.7.41 Identify simple compounds.</p> <p>12.7.42 Define atom as the smallest part of an element that has properties of that element.</p> <p>12.7.43 Electron has a negative charge, the proton has a positive charge, and the neutron is electrically neutral.</p> <p>12.7.44 A molecule is made up of two or more atoms.</p> <p>12.7.45 Identify the number of different kinds of elements in a chemical formula</p> <p>12.7.46 Conservation of matter</p> <p>12.7.47 Acids and Bases</p>		