

6th GRADE SCIENCE PACING GUIDE 2020 - 2021

FORCES AND MOTION

1	Aug 17 - 21	Scientific Method Laboratory Procedures & Routine	Weekly Quiz	
2	Aug 24 - 28	6.P.1.1 Compare the properties of waves to the wavelike property of energy in earthquakes, light and sound.	Weekly Quiz	
3	Aug 31 - Sept 4	6.P.1.1 Compare the properties of waves to the wavelike property of energy in earthquakes, light and sound.	Weekly Quiz	
4	Sept 8 - 11	6.P.1.2 Explain the relationship among visible light, the electromagnetic spectrum, and sight.	Weekly Quiz	
5	Sept 14 - 18	6.P.1.3 Explain the relationship among the rate of vibration, the medium through which vibrations travel, sound and hearing.	Weekly Quiz	Project: MAPPING OF ACTIVE
6	Sept 21 - 25	6.P.1.3 Explain the relationship among the rate of vibration, the medium through which vibrations travel, sound and hearing.	Weekly Quiz	Project: MAKE YOUR OWN SEISMOGRAPH

MATTER: PROPERTIES AND CHANGE

7	Sept 28 - Oct 2	6.P.2.1 Recognize that all matter is made up of atoms and atoms of the same element are all alike, but are different from the atoms of other elements.	Weekly quiz	
8	Oct 5 - 9	6.P.2.1 Recognize that all matter is made up of atoms and atoms of the same element are all alike, but are different from the atoms of other elements.	Weekly quiz	
9	Oct 12 - 16	6.P.2.2 Explain the effect of heat on the motion of atoms through a description of what happens to particles during a change in phase.	Weekly quiz	
10	Oct 19 - 23	6.P.2.2 Explain the effect of heat on the motion of atoms through a description of what happens to particles during a change in phase.	Weekly quiz	
11	Oct 26 - 30	6.P.2.3 Compare the physical properties of pure substances that are independent of the amount of matter present including density, melting point, boiling point, and solubility to properties that are dependent on the amount of matter present to include volume, mass and weight.	Weekly quiz	
12	Nov 2 - 6	6.P.2.3 Compare the physical properties of pure substances that are independent of the amount of matter present including density, melting point, boiling point, and solubility to properties that are dependent on the amount of matter present to include volume, mass and weight.	Weekly quiz	Project: A 3D Model of an Atom

ENERGY CONSERVATION AND TRANSFER

13	Nov 9 - 13	6.P.3.1 Illustrate the transfer of heat energy from warmer objects to cooler ones using examples of conduction, radiation and convection and the effects that may result.	Weekly quiz	
14	Nov 16 - 24	6.P.3.1 Illustrate the transfer of heat energy from warmer objects to cooler ones using examples of conduction, radiation and convection and the effects that may result.	Weekly quiz	
15	Nov 30 - Dec 4	6.P.3.2 Explain the effects of electromagnetic waves on various materials to include absorption, scattering, and change in temperature	Weekly quiz	
16	Dec 7 - 11	6.P.3.3 Explain the suitability of materials for use in technological design based on a response to heat (to include conduction, expansion, and contraction) and electrical energy (conductors and insulators).	Weekly quiz	Project: INTERACTIVE POSTER ON HEAT TRANSFER

EARTH IN THE UNIVERSE

17	Dec 14 - 18	6.E.1.1 Explain how the relative motion and relative position of the sun, Earth and moon affect the seasons, tides, phases of the moon, and eclipses.	Weekly quiz	
18	Jan 5 - 8	6.E.1.1 Explain how the relative motion and relative position of the sun, Earth and moon affect the seasons, tides, phases of the moon, and eclipses.		
19	Jan 11 -15	6.E.1.2 Explain why Earth sustains life while other planets do not based on their properties (including types of surface, atmosphere and gravitational force) and location to the Sun.	Weekly quiz	

20	Jan 19 - 22	6.E.1.2 Explain why Earth sustains life while other planets do not based on their properties (including types of surface, atmosphere and gravitational force) and location to the Sun.	Weekly quiz	
21	Jan 25 - 29	6.E.1.3 Summarize space exploration and the understandings gained from them.		
22	Feb 1 - 5	6.E.1.3 Summarize space exploration and the understandings gained from them.		

EARTH SYSTEMS, STRUCTURES AND PROCESSES

23	Feb 8 - 12	6.E.2.1 Summarize the structure of the earth, including the layers, the mantle and core based on the relative position, composition and density	Weekly Quiz	
24	Feb 15 - 19	6.E.2.1 Summarize the structure of the earth, including the layers, the mantle and core based on the relative position, composition and density	Weekly Quiz	
25	Feb 22 - 26	6.E.2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth.	Weekly Quiz	
26	Mar 1 - 5	6.E.2.2 Explain how crustal plates and ocean basins are formed, move and interact using earthquakes, heat flow and volcanoes to reflect forces within the earth.	Weekly Quiz	Plate Tectonics
27	Mar 8 - 12	6.E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops.		
28	Mar 15 - 19	6.E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops.	Weekly Quiz	
29	Mar 22 - 26	6.E.2.4 Conclude that the good health of humans requires: monitoring the lithosphere, maintaining soil quality and stewardship	Weekly Quiz	

ECOSYSTEM

30	April 6 - 9	6.L.2.1 Summarize how energy derived from the sun is used by plants to produce sugars (photosynthesis) and is transferred within food chains and food webs (terrestrial and aquatic) from producers to consumers to decomposers.	Weekly Quiz	
31	April 12 - 16	6.L.2.2 Explain how plants respond to external stimuli (including dormancy and forms of tropism) to enhance survival in an environment.	Weekly Quiz	
32	April 19 - 23	6.L.2.3 Summarize how the abiotic factors (such as temperature, water, sunlight, and soil quality) of biomes (freshwater, marine, forest, grasslands, desert, Tundra) affect the ability of organisms to grow, survive and/or create their own food through photosynthesis.	Weekly Quiz	
33	April 26 - 30	6.L.2.3 Summarize how the abiotic factors (such as temperature, water, sunlight, and soil quality) of biomes (freshwater, marine, forest, grasslands, desert, Tundra) affect the ability of organisms to grow, survive and/or create their own food through photosynthesis.	Weekly Quiz	

May 3 - 19

REVIEW FOR NC FINALS