WARREN COUNTY SCHOOLS
8th GRADE SCIENCE PACING GUIDE 2019 - 2020

					EOG Weight
ENERGY & ENERGY CONSERVATION: Check-in Benchmark I					10-12%
1	*Aug 17 - 21*	Scientific Method Laboratory Procedures & Routine	Weekly Quiz		
2	*Aug 24 - 28*	8. P.2.1 Explain the environmental consequences of the various methods of obtaining, transforming, and distributing energy.	Weekly Quiz		
3	*Aug 31 - Sept 4*	8. P.2.1 Explain the environmental consequences of the various methods of obtaining, transforming, and distributing energy.	Weekly Quiz		
4	*Sept 8 - 11*	8. P.2.2 Explain the implications of the depletion of renewable and nonrenewable energy resources and the importance of conservation.	PBL: From the Powerhouse		
5	*Sept 14 - 18*	8. P.2.2 Explain the implications of the depletion of renewable and nonrenewable energy resources and the importance of conservation.	Project: A Working Model of An Energy Source	Rubrics	
MATTER: PROPERTIES AND CHANGE: Check-in Benchmark I					14-16%
6	*Sept 21 - 25*	8. P.1.1 Classify matter as elements, compounds, or mixtures based on how the atoms are packed together in arrangements.	Weekly quiz		
7	*Sept 28 - Oct 2*	8. P.1.1 Classify matter as elements, compounds, or mixtures based on how the atoms are packed together in arrangements.	Weekly quiz		
8	*Oct 5 - 9*	8.P.1.2 Explain how the physical properties of elements and their reactivity have been used to produce the current model of the Periodic Table of Elements	Weekly quiz		
9	*Oct 12 - 16*	8.P.1.2 Explain how the physical properties of elements and their reactivity have been used to produce the current model of the Periodic Table of Elements	Weekly quiz		
10	*Oct 19 - 23*	8.P.1.3 Compare physical changes such as size, shape and state to chemical changes that are the result of a chemical reaction to include chagnes in temperature, color, formation of a gas or precipitate.	Weekly quiz		
11	*Oct 26 - 30*	8. P.1.4 Explain how the idea of atoms and a balanced chemical equation support the law of conservation of mass.	Project: A 3D Model of an Atom		
EARTH SYSTEMS, STRUCTURES AND PROCESSES (HYDROSPHERE): Check-in Benchmark 2					13-15%
12	*Nov 2 - 6*	8.E.1.1 Explain the structure of the hydrosphere including: Water distribution on Earth, Local river basin and water availability	Weekly quiz		
13	*Nov 9 - 13*	8.E.1.2 Summarize evidence that Earth's oceans are a reservoir of nutrients, minerals, dissolved gases, and life forms: estuaries, upwelling, value and sustainability of marine resources, marine ecosystems, behavior of gases in the marine environment, deep ocean technology and understanding gained	Weekly quiz		
14	*Nov 16 - 24*	8.E.1.3 Predict the safety and potability of water supplies in North Carolina based on physical and biological factors, including: temperature, dissolved oxygen, pH, nitrates and phospates, turbidity, bio-indicators	Weekly quiz		
15	*Nov 30 - Dec 4*	8.E.1.4 Conclude that the good health of humans requires: -Monitoring of the hydrosphere -Water quality standards - Methods of water treatment -Maintaining safe water quality -Stewardship	Weekly quiz		
EARTH HISTORY: Check-in Benchmark 2					11-13%
16	*Dec 7 - 11*	8. E.2.1 Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating).	Weekly quiz		
17	*Dec 14 - 18*	8. E.2.1 Infer the age of Earth and relative age of rocks and fossils from index fossils and ordering of rock layers (relative dating and radioactive dating).			
18	*Jan 5 - 8*	8. E.2.2 Explain the use of fossils, ice cores, composition of sedimentary rocks, faults, and igneous rock formations found in rock layers as evidence of the history of the Earth and its changing life forms.	Weekly quiz		
19	*Jan 11 -15*	8. E.2.2 Explain the use of fossils, ice cores, composition of sedimentary rocks, faults, and igneous rock formations found in rock layers as evidence of the history of the Earth and its changing life forms.	Weekly quiz		
EVOLUTION AND GENETICS: Check-in Benchmark 3					11 - 13%
20	*Jan 19 -22*	8. L.4.1 Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.	Weekly Quiz		

21	*Jan 25 - 29*	8. L.4.1 Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.	Weekly Quiz		
22	*Feb 1 - 5*	8. L.4.2 Explain the relationship between genetic variation and an organism's ability to adapt to its environment.	Weekly Quiz		
23	*Feb 8 - 12*	8. L.4.2 Explain the relationship between genetic variation and an organism's ability to adapt to its environment.	Weekly Quiz		
ECOSYSTEM: Check-in Benchmark 3					9 - 11%
24	*Feb 15 - 19*	8. L.3.1 Explain how factors such as food, water, shelter, and space affect populations in an ecosystem.	Weekly Quiz		
25	*Feb 22 - 26*	8.L.3.2 Summarize the relationships among producers, consumers, and decomposers including the positive and negative consequences of such interactions including: coexistence and cooperation, competition (predator/prey), parasistism, mutualism	Weekly Quiz		
26	*Mar 1 -5*	8. L.3.3 Explain how the flow of energy within food webs is interconnected with the cycling of matter (including water, nitrogen, carbon dioxide, and oxygen).	Weekly Quiz		
STRUCTURES AND FUNCTIONS OF LIVING ORGANISMS: Check-in Benchmark 3					19 - 23%
27	*Mar 8 - 12*	8.L.1.1 Summarize the basic characteristics of viruses, bacteria, fungi and parasites relating to the spread, treatment and prevention of disease.	Weekly Quiz		
28	*Mar 15 - 19*	8.L.1.1 Summarize the basic characteristics of viruses, bacteria, fungi and parasites relating to the spread, treatment and prevention of disease.	Weekly Quiz		
29	*Mar 22 - 26*	8.L.1.2 Explain the difference between epidemic and pandemic as it relates to the spread, treatment and prevention of disease	Weekly Quiz		
30	*April 6 - 9*	8.L.2.1 Summarize aspects of biotechnology including: • Specific genetic information available • Careers • Economic benefits to North Carolina • Ethical issues • Implications for agriculture	Weekly Quiz		
MOLECULAR BIOLOGY: Check-in Benchmark 3					8 - 10%
31	April 12 - 16	8.L.5.1 Summarize how food provides the energy and the molecules required for building materials, growth and survival of all organisms (to include plants).	Weekly Quiz		
32	April 19 - 23	8.L.5.2 Explain the relationship among a healthy diet, exercise, and the general health of the body (emphasis on the relationship between respiration and digestion).	Weekly Quiz		
April 26 - May 19		**REVIEW FOR EOG**			