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| **North Carolina 5th FOSS Correlation** | | |
| *North Carolina Essential Standards* | *FOSS Kits* | *Books* |
| **MATTER, PROPERTIES AND CHANGE** | | |
| 5.P.2 Understand the interactions of matter and energy and the changes that occur. | | |
| 5.P.2.1 Explain how the sun’s energy impacts the processes of the water cycle (including, evaporation, transpiration, condensation, precipitation and runoff). | FOSS 3rD Edition  Weather on Earth | DSR: Oceans; Water Cycle;  Weather Watching; Weather Instruments; Weather Forecasting;  Earth, Moon and Sun  DSCR: Air and Water;  Weather and Climate;  Earth, Moon and Sun System  FOSS: Solar Energy; Water Planet;  Weather on Earth; Weather and Water |
| **ENERGY: CONSERVATION AND TRANSFER** | | |
| 5.P.3 Explain how the properties of some materials change as a result of heating and cooling. | | |
| 5.P.3.1 Explain the effects of the transfer of heat (either by direct contact or at a distance) that occurs between objects at different temperatures (conduction, convection or radiation). | FOSS 3rd Edition  Weather on Earth | DSR: Water Cycle; States of Matter  DSCR: Heat and Light Energy  FOSS: Water Planet; Solar Energy;  Matter and Energy; Weather on Earth;  Weather and Water;  Energy and Electromagnetism |
| 5.P.3.2 Explain how heating and cooling affect some materials and how this relates to their purpose and  practical applications. | FOSS 3rd Edition  Weather on Earth | DSR: Water Cycle; States of Matter  DSCR: Heat and Light Energy  FOSS: Water Planet; Solar Energy;  Weather on Earth; Matter and Energy;  Weather and Water; Energy and Electromagnetism |
| **EARTH SYSTEMS, STRUCTURE AND PROCESSES** | | |
| **5.E.1 Understand weather patterns and phenomena, making connections to the weather in a particular place and time.** | | |
| 5.E.1.1 Compare daily and seasonal changes in weather conditions (including wind speed and direction,  precipitation, and temperature) and patterns. | FOSS 3rd Edition  Weather on Earth | DSR: Weather Forecasting  DSCR: Weather and Climate  FOSS: Solar Energy; Water Planet;  Weather on Earth; Weather and Water |
| 5.E.1.2 Predict upcoming weather events from weather data collected through observation and measurements. | FOSS 3rd Edition  Weather on Earth | DSR:  Weather Forecasting  DSCR: Weather and Climate  FOSS: Solar Energy;  Water Planet; Weather on Earth;  Weather and Water |
| 5.E.1.3 Explain how global patterns such as the jet stream and water currents influence local weather in measurable Terms such as temperature, wind direction and speed, and precipitation. | FOSS 3rd Edition  Weather on Earth | Weather Forecasting  DSCR: Air and Water; Weather and Climate  FOSS: Solar Energy; Water Planet;  Weather on Earth; Weather and Water |