

Issues and Science *Third Edition: Developed for the NGSS*

Middle School Units at a Glance*

| | Unit Title Estimated Instructional Time | Unit Focus | Assessed PEs |
|------------------|--|--|--|
| LIFE SCIENCE | Biomedical Engineering (3-4 weeks) | <i>How can science and engineering be used to improve the lives of those living with medical conditions?</i> | ETS1-1, ETS1-2, ETS1-3, ETS1-4 |
| | Body Systems (5-6 weeks) | <i>How do we know if a medicine is safe and effective?</i> | LS1-3, LS1-8 |
| | Ecology (6-7 weeks) | <i>What are the environmental impacts of introduced species and what can be done about them?</i> | LS2-1, LS2-2, LS2-3, LS2-4, LS2-5 |
| | Evolution (6-7 weeks) | <i>How are people affected by and affecting evolution?</i> | LS3-1, LS4-1, LS4-2, LS4-3, LS4-4, LS4-5, LS4-6 |
| | From Cells to Organisms (5-6 weeks) | <i>How should we prevent the spread of an infectious disease?</i> | LS1-1, LS1-2, LS1-6, LS1-7 |
| | Reproduction (4-6 weeks) | <i>What are the ethical issues involved in using genetic information to make health-related decisions?</i> | LS1-4, LS1-5, LS3-1, LS3-2 |
| EARTH SCIENCE | Earth's Resources (4-6 weeks) | <i>How is a growing human population affecting the use and availability of natural resources?</i> | ESS1-4, ESS3-1, ESS3-4 |
| | Geological Processes (6-7 weeks) | <i>What geological processes need to be considered when evaluating a site for long-term storage of nuclear waste?</i> | ESS2-1, ESS2-2, ESS2-3, ESS3-1, ESS3-2 |
| | Land, Water, and Human Interactions (5-7 weeks) | <i>How do natural geological processes and human behavior impact our decisions around new construction?</i> | ESS2-2, ESS2-4, ESS3-3, ETS1-1, ETS1-2 |
| | Solar System and Beyond (4-7 weeks) | <i>What kind of future space missions should we fund and conduct?</i> | ESS1-1, ESS1-2, ESS1-3 |
| | Weather and Climate (5-7 weeks) | <i>Is there a connection between population growth and changes in local weather, atmosphere, and water availability?</i> | ESS2-5, ESS2-6, ESS3-5, ETS1-3, ETS1-4 |
| PHYSICAL SCIENCE | Chemical Reactions (4-5 weeks) | <i>How do people use chemical reactions to solve problems like waste disposal?</i> | PS1-2, PS1-5, PS1-6 |
| | Chemistry of Materials (4-5 weeks) | <i>What are the environmental impacts of producing, using, and disposing of materials?</i> | PS1-1, PS1-3, PS1-4 |
| | Energy (5-7 weeks) | <i>How can people manipulate energy transfer and transformation to use energy more efficiently?</i> | PS3-3, PS3-4, PS3-5, MS-ETS1-4 |
| | Fields and Interactions (4-6 weeks) | <i>How do the characteristics of fields help us design solutions for transport?</i> | PS2-3, PS2-4, PS2-5, PS3-2, ETS1-1, ETS1-2, ETS1-3, ETS1-4 |
| | Force and Motion (5-7 weeks) | <i>How can we reduce the risk of motor vehicle accidents?</i> | PS2-1, PS2-2, PS3-1, ETS1-1 |
| | Waves (4-5 weeks) | <i>How are waves both helpful and harmful?</i> | PS4-1, PS4-2, PS4-3 |

* for detailed information on each unit, refer to the Unit Overview and Storyline/Phenomena documents at lab-aids.com/third-edition