3rd Grade Science Pacing Guide

2018 - 2019 Parsons Elementary

Based on Houghton Mifflin Harcourt Science Curriculum

**\*\* Standard 3.ETS2.1 - Identify and demonstrate how technology can be used for different purposes, is embedded throughout multiple portions of the textbook, repeatedly beginning with unit 2.**

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| Standard Number | Unit /  Lessons | Pages | Standard Description |
|  | 1 |  | Introduction & Investigations |
| 3.ETS1.1 | 2 L 1-2 | 55  67 | 1) Design a solution to a real-world problem that includes specified criteria for constraints. |
| 3.ETS2.1 | 2 L3 | 69 | 1) Identify and demonstrate how technology can be used for different purposes. |
| 3.ETS1.2 | 2 L4 | 81 | 2) Apply evidence or research to support a design solution. |
| 3.PS1.1 | 3 L1-2 | 91  105 | 1) Describe the properties of solids, liquids, and gases and identify that matter is made up of particles too small to be seen. |
| 3.PS1.3 | 3 L 1,2,3, 5 | (3) 117  (5) 133 | 3) Describe and compare the physical properties of matter including color, texture, shape, length, mass, temperature, volume, state, hardness, and flexibility. |
| 3.PS1.2 | 3 L4 | 119 | 2) Differentiate between changes caused by heating or cooling that can be reversed and that cannot. |
| 3.PS2.1  3.PS3.3 | 4 L1 | 143 | 1) Explain the cause and effect relationship of magnets.  3) Evaluate how magnets cause changes in the motion and position of objects, even when the objects are not touching the magnet. |
| 3.PS2.2 | 4 L2 | 157 | 2) Solve a problem by applying the use of the interactions between two magnets. |
| 3.PS3.1 | 5 L1-2 | 167  183 | 1) Recognize that energy is present when objects move; describe the effects of energy transfer from one object to another. |
| 3.PS3.2 | 5 L3-4 | 185  187 | 2) Apply scientific ideas to design, test, and refine a device that converts electrical energy to another form of energy, using open or closed simple circuits. |
| 3.LS1.1 | 6 L1-5 | 223  233  245  247  257  261 | 1) Analyze the internal and external structures that aquatic and land animals and plants have to support survival, growth, behavior, and reproduction. |
| 3.LS2.1 | 6 L6 | 263 | 1) Construct an argument to explain why some animals benefit from forming groups. |
| 3.LS4.2 | 6 L4-5 | 247  261 | 2) Infer that plant and animal adaptations help them survive in land and aquatic biomes. |
|  | 7 L1-4 | 283 | Ecosystems & Food Chains (NO STANDARD, but relates to biological change : unity & diversity) |
| 3.LS4.1  3.LS4.3 | 7 L5 | 313 | 1) Explain the cause and effect relationship between a naturally changing environment and an organism's ability to survive.  3) Explain how changes to an environment's biodiversity influence human resources |
| 3.ESS1.1 | 8 L1 | 349 | 1) Use data to categorize the planets in the solar system as inner or outer planets according to their physical properties. |
| 3.ESS2.1 | 9 L1 | 375 | 1) Explain the cycle of water on Earth. |
| 3.ESS2.2 | 9 L2 | 389 | 2) Associate major cloud types (cumulus, cumulonimbus, cirrus, stratus, nimbostratus) with weather conditions |
| 3.ESS2.3 | 9 L3-4 | 401  405 | 3) Use tables, graphs, and tools to describe precipitation, temperature, and wind (direction and speed) to determine local weather and climate. |
| 3.ESS2.4 | 9 L4 | 405 | 4) Incorporate weather data to describe major climates (polar, temperate, tropical) in different regions of the world. |
| 3.ESS3.1  3.ESS3.2 | 10 L4 | 447 | 1) Explain how natural hazards (fires, landslides, earthquakes, volcanic eruptions, floods) impact humans and the environment.  2) Design solutions to reduce the impact of natural hazards (fires, landslides, earthquakes, volcanic eruptions, floods) on the environment. |
| 3.ETS2.1 | U2L3, U4, U5L4-5, U6, U8, U10 |  | 1) Identify and demonstrate how technology can be used for different purposes. |