



Mi-STAR Unit Progression Model (Grades 6-8)

With NGSS Performance Expectations (PEs) and Unifying Crosscutting Concepts (UCCC)

Mi-STAR is made possible by a grant from the Herbert H. and Grace A. Dow Foundation. Neither Achieve nor the NGSS lead states and partners were involved in the production of this product.

| Grade | 1 st Semester Units | | | | 2 nd Semester Units | | | |
|-------------|---|---|--|--|--|--|--|--|
| UCCC | Systems and system models | | | | Patterns / Cause and effect | | | |
| 6 | 6.1⁺ Protecting our community's water through land use MS-ESS2-4 MS-PS1-4 MS-ETS1-1* (ETS1.A) <small>W, B</small> | 6.2 Investigating and modeling body systems MS-LS1-1 MS-LS1-2 MS-LS1-3 MS-ETS1-3* (ETS1.B) <small>P</small> | 6.3 How our bodies use food MS-LS1-7 MS-PS1-2 MS-PS1-5 MS-PS1-6 <small>P</small> | 6.4 Protecting devices from everyday forces MS-PS2-1 MS-PS2-2 MS-ETS1-1* <small>B</small> | 6.5 What plants need to grow MS-LS1-5 MS-LS2-1* <small>F</small> | 6.6⁺ Managing invasive species to protect ecosystem interactions MS-LS2-1* MS-LS2-2 MS-LS2-4 MS-ETS1-2 <small>S</small> | 6.7 Cycling of matter and energy through food webs MS-LS1-6 MS-LS2-3 <small>F</small> | |
| UCCC | Energy and matter | | | | Structure and function | | | |
| 7 | 7.1⁺ Generating electricity MS-PS2-3 MS-PS3-1 MS-PS3-2 MS-PS3-5 <small>EE</small> | 7.2 Cycling and use of minerals MS-ESS2-1 MS-ESS2-2 MS-ESS2-3* (ESS2.B) MS-PS1-1* (PS1.A) <small>ES</small> | 7.3⁺ Selecting sustainable building materials by modeling their life cycle MS-PS1-3 MS-ESS3-1 MS-ESS3-4* (ESS3.C) MS-PS3-3* (PS3.A,B) <small>EE</small> | 7.4 Designing a device to regulate thermal energy transfer MS-PS3-3 MS-PS3-4 MS-ETS1-4 <small>B</small> | 7.5 How humans affect plant/animal reproduction MS-LS1-4 MS-ESS3-3 <small>S</small> | 7.6 Genetics and agriculture MS-LS1-5* (LS1.B) MS-LS3-1 MS-LS3-2 MS-LS4-5 <small>F</small> | 7.7 Water chemistry and quality MS-PS1-1 MS-ESS2-2* (ESS2.C) MS-ESS3-1* (ESS3.A) <small>P</small> | 7.8 Maintaining ecosystem services MS-LS2-5 MS-ETS1-3 <small>W</small> |
| UCCC | Scale, proportion, and quantity | | | | Stability and change | | | |
| 8 | 8.1 Natural selection and antibiotics MS-LS3-1* (LS3.B) MS-LS4-4 MS-LS4-6 <small>P</small> | 8.2 History of life on earth MS-LS4-1 MS-LS4-2 MS-LS4-3 MS-ESS1-4 <small>S</small> | 8.3 Sound and light waves in communication MS-PS2-5 MS-PS4-1 MS-PS4-2 MS-PS4-3 MS-LS1-8 <small>B</small> | 8.4 Solar system, forces, and seasons MS-ESS1-1* (ESS1.A) MS-ESS1-2 MS-ESS1-3 MS-PS2-4 <small>ES</small> | 8.5 Weather, climate, and Michigan agriculture MS-ESS1-1 MS-ESS2-5 MS-ESS2-6 <small>F</small> | 8.6⁺ Predicting natural hazards and reducing their impacts MS-ESS3-2 MS-ESS2-3 <small>P</small> | 8.7⁺ Investigating and addressing climate change MS-ESS3-4 MS-ESS3-5 <small>W</small> | |

Key: Each unit addresses a theme, as indicated by the following color/letter coding:

| | | | | | | |
|---|---|--|---|--|--|---|
| Built Environment <small>B</small> | Human & Public Health <small>P</small> | Food & Agriculture <small>F</small> | Water Resources <small>W</small> | Sustainable Ecosystems <small>S</small> | Earth & Space Systems <small>ES</small> | Earth & Energy Resources <small>EE</small> |
|---|---|--|---|--|--|---|

⁺Indicates units that are available for classroom implementation. For all other units, the unit topic is subject to revision based on the creative design of curriculum design teams.

*Where a specific DCI is noted in parentheses following a PE, only the DCI is primary in the package. The CCC, SEP, or other DCIs associated with the PE are not primary

Note: PEs, concepts, and practices indicated here are thoroughly addressed in the unit. Each unit also addresses supporting concepts and practices that allow for scaffolded learning over time.

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