Applicable State of Michigan Grade Level Content Expectations (GLCEs)

Below is a list of content standards, statements, and grade level expectations applicable to the program “Understanding Insects and Spiders.”

**Grade Levels 2-7:**
Note: No GLCE Science Standards are available for Grade 8

**Michigan Grade Level Content Expectations: Science**

- **Discipline 1: Science Processes**
  - **K-7 Standard: Inquiry Process (IP)**
    - **Grades 2-4 Expectations:**
      - S.IP.02.11, S.IP.03.11 & S.IP.04.11 Make purposeful observation of the natural world using the appropriate senses.
      - S.IP.02.12, S.IP.03.12 & S.IP.04.12 Generate questions based on observations.
      - S.IP.02.13, S.IP.03.13 & S.IP.04.13 Plan and conduct simple and fair investigations.
      - S.IP.02.14, S.IP.03.14 & S.IP.04.14 Manipulate simple tools that aid observation and data collection
    - **Grades 5-7 Expectations:**
      - S.IP.05.11, S.IP.06.11 & S.IP.07.11 Generate scientific questions based on observations, investigations, and research.
      - S.IP.05.12, S.IP.06.12 & S.IP.07.12 Design and conduct scientific investigations.
      - S.IP.05.13, S.IP.06.13 & S.IP.07.13 Use tools and equipment (spring scales, stop watches, meter sticks and tapes, models, hand lens) appropriate to scientific investigations.
  - **K-7 Standard: Inquiry Analysis and Communication (IA)**
    - **Grade 2 Expectations:**
      - S.IA.02.14 Develop strategies and skills for information gathering and problem solving (books, internet, ask an expert, observation, investigation, technology tools).
    - **Grades 3-4 Expectations:**
      - S.IA.03.12, S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups.
      - S.IA.03.14, S.IA.04.14 Develop research strategies and skills for information gathering and problem solving.
    - **Grades 5-7 Expectations:**
      - S.IA.05.12, S.IA.06.12 & S.IA.07.12 Evaluate data, claims, and personal knowledge through collaborative science discourse.
      - S.IA.05.13, S.IA.06.13 & S.IA.07.13 Communicate and defend findings of observations and investigations using evidence.
  - **K-7 Standard: Reflection and Social Implication (RS)**
    - **Grades 2-7 Expectations**
      - *General Concepts of Above Statement Covered*
• Discipline 3: Life Science
  o K-7 Standard: Organization of Living Things (OL)
    • Grade 2 Expectation:
      • General Concepts of Above Statement Covered
    • Grade 3 Expectation:
      • L.OL.E.4 Classification- Organisms can be classified on the basis of observable characteristics.
    • Grades 4-5 Expectations:
      • General Concepts of Above Statement Covered
    • Grade 6 Expectation:
      • L.OL.06.51 Classify producers, consumers, and decomposers based on their source of food (the source of energy and building materials).
    • Grade 7 Expectation:
      • General Concepts of Above Statement Covered
  o K-7 Standard: Evolution (EV)
    • Grades 2, 4 Expectations:
      • General Concepts of Above Statement Covered
    • Grade 3 Expectation:
      • L.EV.03.12 Relate characteristics and functions of observable body parts to the ability of animals to live in their environment (sharp teeth, claws, color, body coverings).
    • Grade 5 Expectation:
      • L.EV.05.12 Describe the physical characteristics (traits) of organisms that help them survive in their environment.
    • Grades 6-7 Expectations:
      • General Concepts of Above Statement Covered
  o K-7 Standard: Ecosystems (EC)
    • Grades 2-5, 7 Expectation:
      • General Concepts of Above Statement Covered
    • Grade 4 Expectation:
      • L.EC.04.11 Identify organisms as part of a food chain or food web.
    • Grade 6 Expectation:
      • L.EC.06.21 Describe common patterns of relationships between and among populations (competition, parasitism, symbiosis, predator/prey).
      • L.EC.06.23 Predict how changes in one population might affect other populations based upon their relationships in the food web.