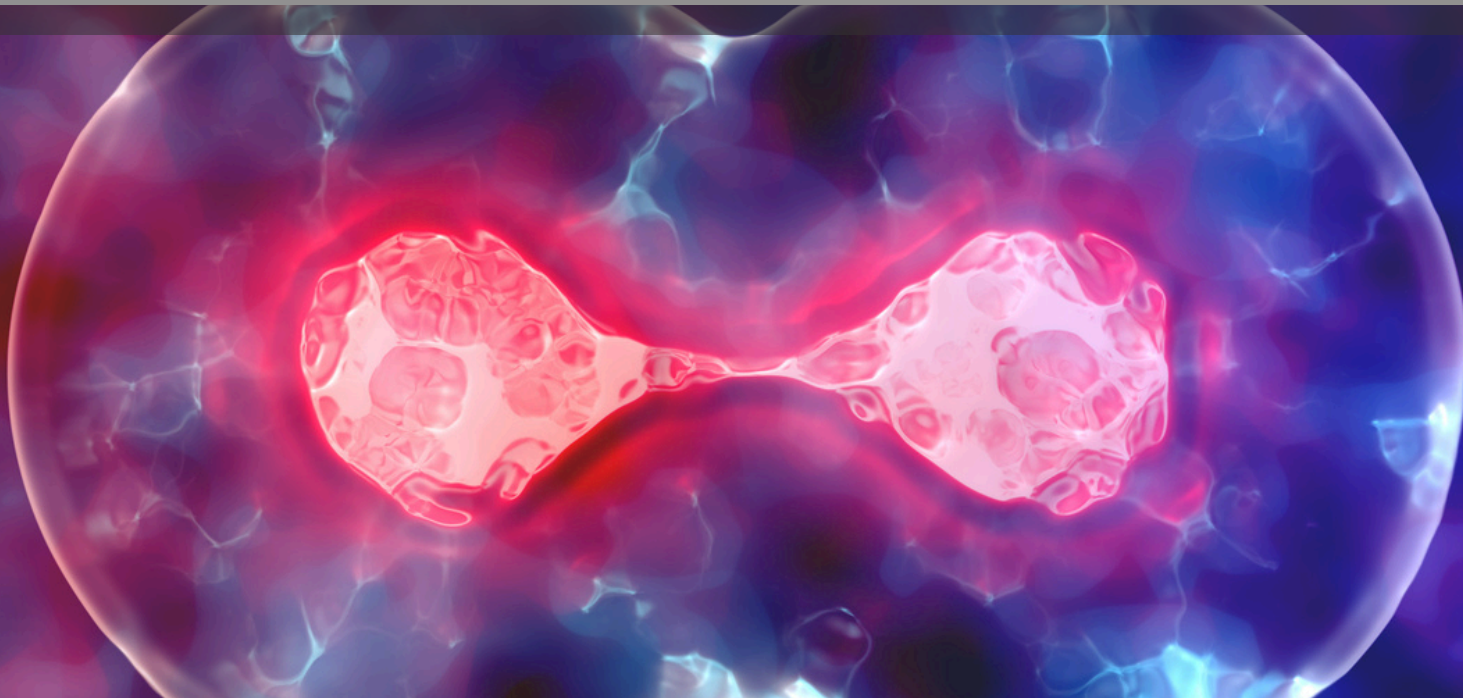


NGSS MS-LS1

Molecules to Organisms: Structures & Processes

Full Standard BUNDLE

- ✓ Everything You Need to Teach NGSS MS-LS1
- ✓ Lessons, Activities, Labs, Projects, and more
- ✓ MS-LS1-1, LS1-2, LS1-3, LS1-4, LS1-5, LS1-6, LS1-7, LS1-8



Bundles Included

NGSS MS-LS1-1
Curriculum Bundle

What Are Living Things Made Of?
Exploring Cells and Life

- ✓ 3 Lessons and 7 Activities
- ✓ Everything You Need to Teach NGSS MS-LS1-1



NGSS MS-LS1-2
Curriculum Bundle

Cell Structure and Function

- ✓ 2 Lessons and 11 Activities
- ✓ Everything You Need to Teach NGSS MS-LS1-2



NGSS MS-LS1-5
Curriculum Bundle

How Environmental and Genetic Factors Influence Organism Growth

- ✓ 2 Lessons and 8 Activities
- ✓ Everything You Need to Teach NGSS MS-LS1-5



NGSS MS-LS1-6
Curriculum Bundle

Role of Photosynthesis in the Cycling of Matter and Flow of Energy

- ✓ 1 Lesson and 8 Activities
- ✓ Everything You Need to Teach NGSS MS-LS1-6



NGSS MS-LS1-3
Curriculum Bundle

Human Body Systems

- ✓ 1 Lesson and 11 Activities
- ✓ Everything You Need to Teach NGSS MS-LS1-3



NGSS MS-LS1-7
Curriculum Bundle

Food, Energy, and Chemical Reactions in the Body

- ✓ 1 Lesson and 7 Activities
- ✓ Everything You Need to Teach NGSS MS-LS1-7



NGSS MS-LS1-4
Curriculum Bundle

Plant and Animal Structures and Behaviors for Reproduction

- ✓ 2 Lessons and 3 Activities
- ✓ Everything You Need to Teach NGSS MS-LS1-4



NGSS MS-LS1-8
Curriculum Bundle

How We Sense the World Around Us

- ✓ 1 Lesson and 1 Activity
- ✓ Everything You Need to Teach NGSS MS-LS1-8



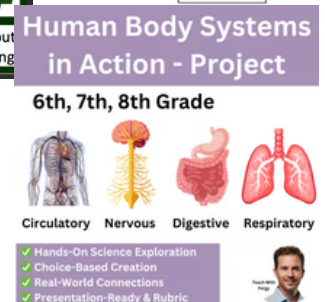
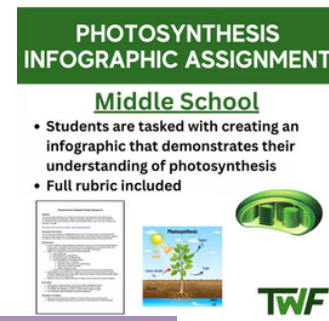
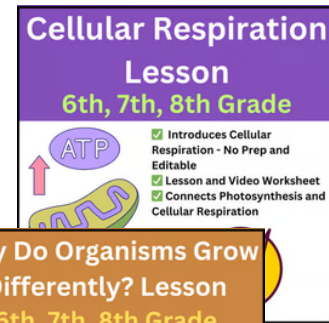
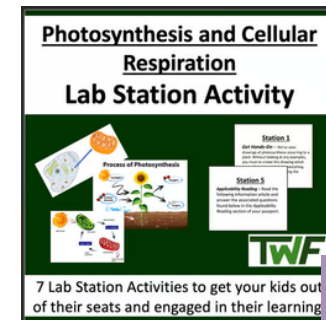
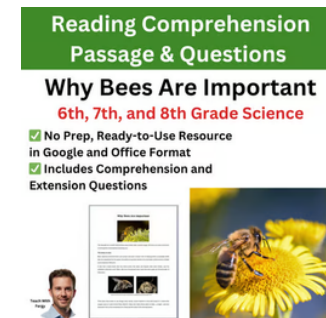
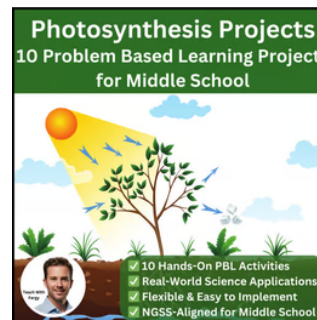
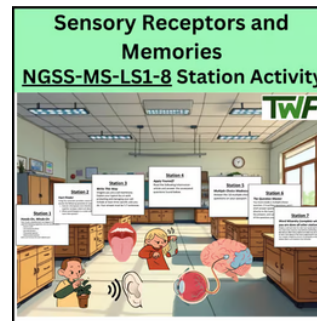
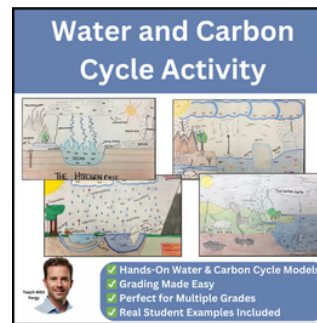
Everything You Need to Completely Cover NGSS MS-LS1

Complete Lessons

Activities

Labs

Projects



The Standard is Explained and the Resources it Incorporates are Outlined

MS-LS1 From Molecules to Organisms: Structures and Processes

Note: There may be resources that overlap between the standards. Simply choose the order that best fits your classroom. Also, there are more resources here than you will most likely decide to use. I have provided extra so you can make the best decision for your students on what is best to include.

MS-LS1-1. Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells. [Clarification Statement: Emphasis is on developing evidence that living things (**including Bacteria, Archaea, and Eukarya) are made of cells, distinguishing between living and non-living things, and understanding that living things may be made of one cell or many and varied cells. **Viruses, while not cells, have features that are both common with, and distinct from, cellular life.]

Resources:

- What Makes Something Alive Lesson
- Animal and Plant Cells Lesson
- Viruses Reading
- Crash Course Biology Why We Aren't Just One Big Cell
- Story Prompt Maya and the Remarkable World of Cells
- Case Study - How Viruses Make Us Sick
- Bill Nye Cells Video Worksheet
- Unicellular Multicellular Organisms Digital Interactive Notebook Pages
- Introduction to Cells Station Activity

MS-LS1-2. Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function. [Clarification Statement: Emphasis is on the cell functioning as a whole system and the primary role of identified parts of the cell, specifically the nucleus, chloroplasts, mitochondria, cell membrane, and cell wall.] [Assessment Boundary: Assessment of organelle structure/function relationships is limited to the cell wall and cell membrane. Assessment of the function of the other organelles is limited to the biochemical function of the organelle.]

Resources:

- Cell Membrane and Transport Lesson
- Cellular Organelles Lesson
- Card Matching Cell Organelles
- Cell Organelles - Scavenger Hunt
- Cell Organization Digital Interactive Notebook Pages
- Cells and Cell Organelles BINGO
- Cells and Organelles Word Search
- Cells and Organelles Word Scramble
- Cellular Organelles Structure and Function Station Activity
- Crash Course BIOLOGY A To Z
- Diffusion Osmosis Through a Membrane Lesson
- Science Story Prompt Tanisha

MS-LS1-5. Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms. [Clarification Statement: Examples of local environmental conditions could include availability of food, light, space, and water. Examples of genetic factors could include large breed cattle and species of grass affecting growth of organisms. Examples of evidence could include drought decreasing plant growth, fertilizer increasing plant growth, different varieties of plant seeds growing at different rates in different conditions, and fish growing larger in large ponds than they do in small ponds.] [Assessment Boundary: Assessment does not include genetic mechanisms, gene regulation, or biochemical processes.]

Resources:

- Why Do Organisms Grow Differently? Lesson
- Genetic Technologies and Gene Therapy Introduction Lesson
- Genetic and Environmental Factors and Growth Station Activity
- Human Impact on Ecosystems Lab Experiment Ecobottles
- Human Impact on Ecosystems Assignment
- What Affects Growth - Exploring Environmental and Genetic Factors Through Data Activity
- Crash Course Biology Video Worksheet Nature Nurture Not That Simple
- Crash Course Biology Video Worksheet How Genes Express Themselves
- Genetically Modified Organisms Reading
- Genetics and Gene Therapy Reading
- Physical Adaptations Reading

MS-LS1-6. Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms. [Clarification Statement: Emphasis is on tracing movement of matter and flow of energy.] [Assessment Boundary: Assessment does not include the biochemical mechanisms of photosynthesis.]

Resources:

- Photosynthesis Lesson
- Photosynthesis Station Activity
- Photosynthesis Comic Book Assignment
- Photosynthesis Infographic Assignment
- Photosynthesis Projects PBL
- Photosynthesis Reading
- Why Leaves Change Color in the Fall - Reading
- Crash Course Carbon Biological Molecules Video Worksheet
- Carbon Cycle Diagram Activity

MS-LS1-3. Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells. [Clarification Statement: Emphasis is on the conceptual understanding that cells form tissues and tissues form organs specialized for particular body functions. Examples could include the interaction of subsystems within a system and the normal functioning of those systems.] [Assessment Boundary: Assessment does not include the mechanism of one body system independent of others. Assessment is limited to the circulatory, excretory, digestive, respiratory, muscular, and nervous systems.]

Resources:

- Body Systems - Working Together to Keep You Alive! Lesson
- Muscle Growth Reading
- The Cardiovascular System Reading
- Body Systems in Action! Project
- Asthma and Asthma Attacks Reading
- Crash Course Biology Animal Infrastructure
- Human Body Systems Station Activity
- The Circulatory System Digital Interactive Notebook Pages
- The Digestive System Digital Interactive Notebook Pages
- The Excretory System Digital Interactive Notebook Pages
- The Muscular and Skeletal System Digital Interactive Notebook Pages
- The Nervous System Digital Interactive Notebook Pages
- The Respiratory System Digital Interactive Notebook Pages

MS-LS1-4. Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

Examples of behaviors that affect the probability of animal reproduction could include animals that protect young from cold, herding of animals to protect young from predators, and colorful plumage to attract mates for breeding. Examples of plant structures that affect the probability of plant reproduction could include transferring pollen to the ovary for seed germination and growth. Examples of plant structures that attract butterflies that transfer pollen, flower nectar and odors that attract bees, and hard shells on nuts that squirrels bury.]

Resources:

- How Plants and Animals Reproduce Lesson
- Plant Reproduction Lesson
- Animal and Plant Adaptations Station Activity
- Crash Course Video Worksheet Sexual and Asexual Reproduction
- Why Bees Are Important Reading

MS-LS1-7. Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism. [Clarification Statement: Emphasis is on describing that molecules are broken apart and put back together and that in this process, energy is released.] [Assessment Boundary: Assessment does not include details of the chemical reactions for photosynthesis or respiration.]

Resources:

- Cellular Respiration Lesson
- Carbon Cycle Diagram Activity
- Cellular Respiration - Station Activity
- Crash Course - Do Cells Breathe Video Worksheet
- Photosynthesis and Cellular Respiration - Crossword Puzzle Activity
- Photosynthesis and Cellular Respiration BINGO
- Photosynthesis and Cellular Respiration Lab Station Activity
- Photosynthesis and Cellular Respiration Word Search and Scramble Activity

MS-LS1-8. Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories. [Assessment Boundary: Assessment does not include mechanisms for the transmission of this information.]

Resource:

- How Do We Sense the World Around Us?
- Sensory Receptors and Memories Station Activity

Who is this Bundle for?

- **Teachers who teach Middle School Science and use the NGSS**
- **Teachers who want multiple resources at their fingertips including lessons and a variety of activities, in order to meet the standard**
- **Teachers who don't have time to develop their own resources or organize what to teach and when**