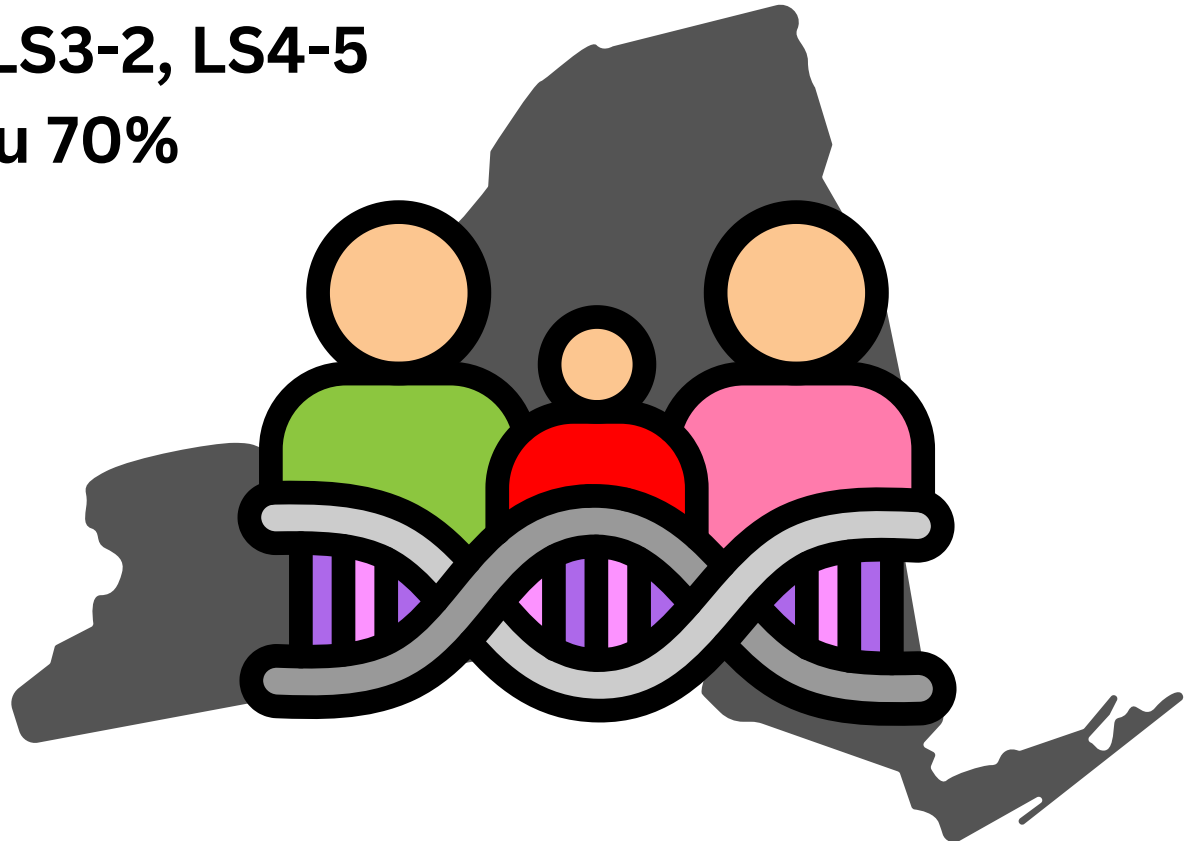


New York State P-12 Science Learning Standards (NYSSLS)

MS. Growth, Development, and Reproduction of Organisms

- ✓ Complete Standard for New York Middle School - Growth, Development, and Reproduction of Organisms Standard
- ✓ MS-LS1-4, LS1-5, LS3-1, LS3-2, LS4-5
- ✓ The Bundle will SAVE you 70%



UPGRADE to the Bundle



This Bundle:

- Get immediate access to my **COMPLETE** New York State Middle School Curriculum
- Every standard covered at a **HUGE DISCOUNT**

New York Middle School Science Curriculum

New York State P-12 Science Learning Standards (NYSSLS)

- ✓ Standards are directly aligned to New York State Middle School Science Standards according to the New York State Education Department
- ✓ The Bundle will SAVE you 80%



Click here to have a look

Resources Included

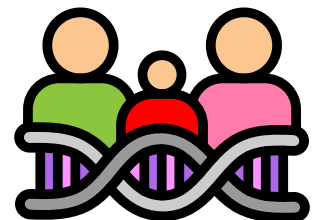
MS-LS1-4

- 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-LS1-5

- 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



Resources Included

MS-LS3-1

- DNA Genes and Mutations Lesson
- Mutations and Inheritance of Traits - Station Activity
- DNA Paternity Tests Reading
- Gregor Mendel - Reading
- Crash Course Video Worksheet How Genes Express Themselves

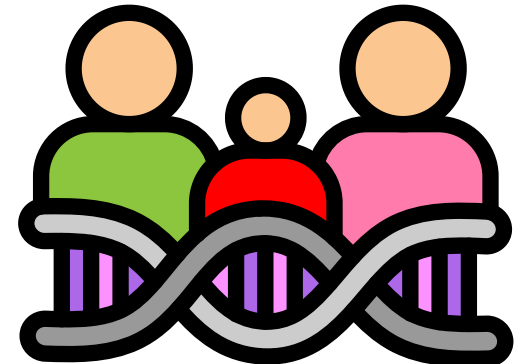
MS-LS3-2

- How Traits Are Passed On — Asexual vs Sexual Reproduction Lesson
- Punnett Square Practice Traits in Action - Activity
- Create-a-Creature Reproduction Models – Activity
- Bill Nye Vide Worksheet - GENES
- Asexual and Sexual Reproduction Station Activity
- Crash Course Biology 47 Sexual and Asexual Reproduction
- Plant Reproduction Lesson
- Plant Reproduction - Scavenger Hunt



MS-LS4-5

- Genetic Technologies and Gene Therapy Lesson
- Reproductive Technologies Lesson
- Reproductive Technologies - Scavenger Hunt
- Artificial Selection - Station Activity
- GMO Research Activity
- Genetically Modified Organisms Reading
- Genetics and Gene Therapy Reading



Bundles Included

NGSS MS-LS1-4 Curriculum Bundle

Plant and Animal Structures and Behaviors for Reproduction

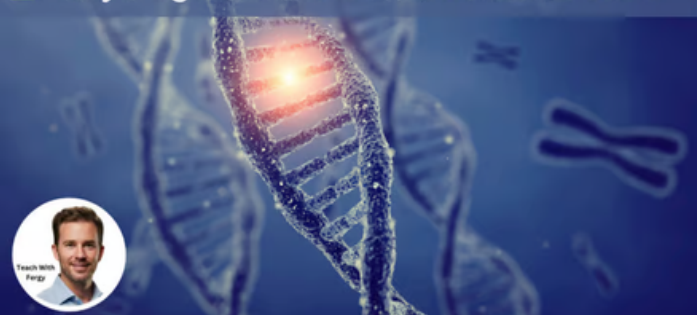
- ✓ 2 Lessons and 3 Activities
- ✓ Everything You Need to Teach NGSS MS-LS1-4



NGSS MS-LS3-1 Curriculum Bundle

Genetic Mutations & Their Effect on Proteins

- ✓ 1 Lesson and 4 Activities
- ✓ Everything You Need to Teach NGSS MS-LS3-1



NGSS MS-LS3-2 Curriculum Bundle

Asexual vs. Sexual Reproduction

- ✓ 2 Lessons and 4 Activities
- ✓ Everything You Need to Teach NGSS MS-LS3-2



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-LS4-5 Curriculum Bundle

Genetic and Reproductive Technologies & Artificial Selection

- ✓ 2 Lessons and 5 Activities
- ✓ Everything You Need to Teach NGSS MS-LS4-5



Everything You Need to Teach Middle School Interdependent Relationships in Ecosystems in New York State using NYSSLS

Complete Lessons

Genetic Technologies and Gene Therapy

- Introduction to Genetic Engineering
- CRISPR Technology
- Viruses and Gene Therapy
- GMOs



TWF MIDDLE SCHOOL LESSON

How Traits Are Passed On: Asexual vs Sexual Reproduction

6th, 7th, 8th Grade Lesson

- ✓ How Traits are Passed On: Sexual and Asexual Reproduction
- ✓ Student + Teacher Versions - Office, Google, and PDF Versions
- ✓ Multimedia-Rich Lesson with No Prep Required



Teach With A Purpose

Plant Reproduction Lesson

6th, 7th, 8th Grade

- ✓ Intro to Plant Reproduction: Sexual and Asexual Reproduction
- ✓ Student + Teacher Versions
- ✓ Multimedia-Rich Lesson with No Prep Required



Teach With A Purpose

Why Do Organisms Grow Differently? Lesson

6th, 7th, 8th Grade

- ✓ Why Do Organisms Grow Differently: Genetic and Environmental Factors.
- ✓ Student + Teacher Versions - Office, Google, and PDF Versions
- ✓ Multimedia-Rich Lesson with No Prep Required



Teach With A Purpose

Engaging Activities

Artificial Selection

NGSS-MS-LS4-5 Station Activity



TWF

Device-Based Scavenger Hunt

Plant Reproduction

Includes

- 5 Unique Locations
- Online form submission
- Answer Key

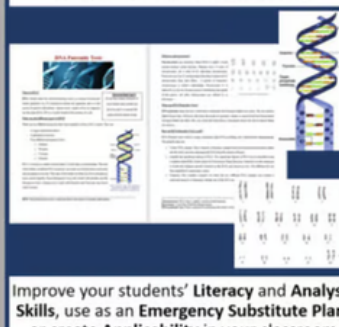
Works on all smartphones, tablets, Chromebooks, and laptops

- 100% Digital
- Simulations
- Quizzes
- Videos
- Games
- and more



DNA Paternity Tests

Scientific Reading Comprehension Article and Extension Activity



Improve your students' Literacy and Analysis Skills, use as an Emergency Substitute Plan, or create Applicability in your classroom

Reading Comprehension Passage & Questions

Physical Adaptations

6th, 7th, and 8th Grade Science

- ✓ No Prep, Ready-to-Use Resource in Google and Office Format
- ✓ Includes Comprehension and Extension Questions



Teach With A Purpose

The Standard is Explained and the Resources it Incorporates are Outlined

MS. Growth, Development, and Reproduction of Organisms – New York State – Middle School

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. [Clarification Statement: Examples of behaviors that affect the probability of animal reproduction could include nest building to protect young from cold, herding of animals to protect young from predators, and vocalization of animals and colorful plumage to attract mates for breeding. Examples of animal behaviors that affect the probability of plant reproduction could include transferring pollen or seeds; and, creating conditions for seed germination and growth. Examples of plant structures could include bright flowers attracting butterflies that transfer pollen, flower nectar and odors that attract insects that transfer pollen, 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-LS1-5. 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

and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the function of the organism.

Conceptual understanding that changes in genetic material may result in making. [Assessment Boundary: Assessment does not include specific changes at the molecular level or mechanisms for protein synthesis, or specific types of mutations.]

and Mutations Lesson
and Inheritance of Traits - Station Activity
Genetic Tests Reading
Model - Reading
Crash Course Video Worksheet How Genes Express Themselves

and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation. [Assessment Boundary: Emphasis is on using models such as Punnett squares, diagrams, and graphs to describe the cause-and-effect relationship of gene transmission from parent(s) to offspring.]

Are Passed On — Asexual vs Sexual Reproduction Lesson
Rare Practice Traits in Action - Activity
Nature Reproduction Models – Activity
Worksheet - GENES
Sexual Reproduction Station Activity
Crash Course Biology 47 Sexual and Asexual Reproduction
Introduction Lesson
Introduction - Scavenger Hunt

and synthesize information about technologies that have changed the way humans interact with the natural world by drawing on information from reliable sources about the influence of humans on the natural world (e.g., global climate change, air pollution, land-use change); and, on the impacts these technologies have on society as well as the technologies leading to these scientific discoveries.

Resources:

- Genetic Technologies and Gene Therapy Lesson
- Reproductive Technologies Lesson
- Reproductive Technologies - Scavenger Hunt
- Artificial Selection - Station Activity
- GMO Research Activity
- Genetically Modified Organisms Reading
- Genetics and Gene Therapy Reading



NYSSLS

Who is this Bundle for?

- Teachers who teach middle school science in **New York State** and use the **NYSSLS**
- 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

