

NGSS MS-LS3-2

Curriculum Bundle

Asexual vs. Sexual Reproduction

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

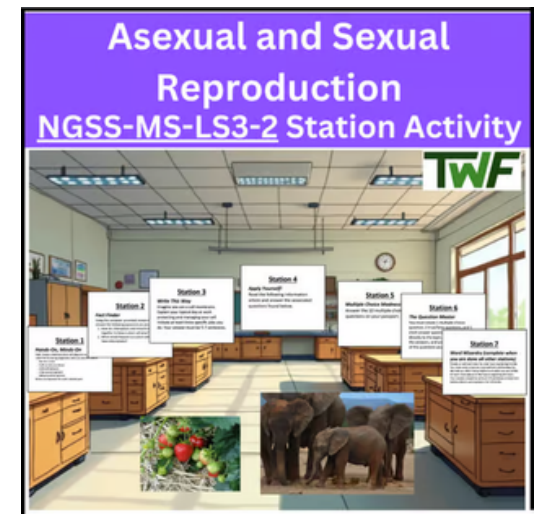
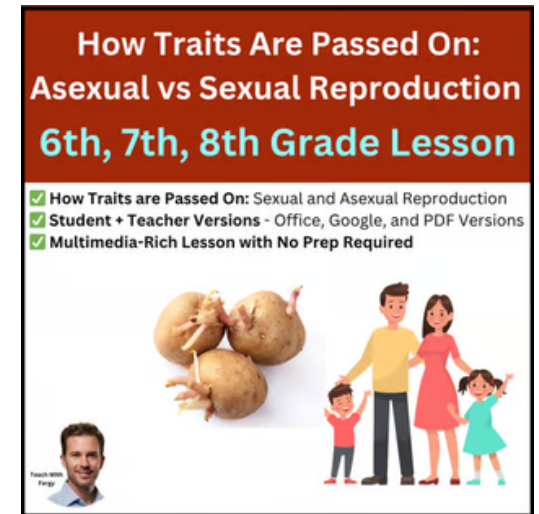


Resources Included

✓ 2 Lessons

✓ 4 Activities

- 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



Everything You Need to Teach NGSS MS-LS3-2

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 Fergy

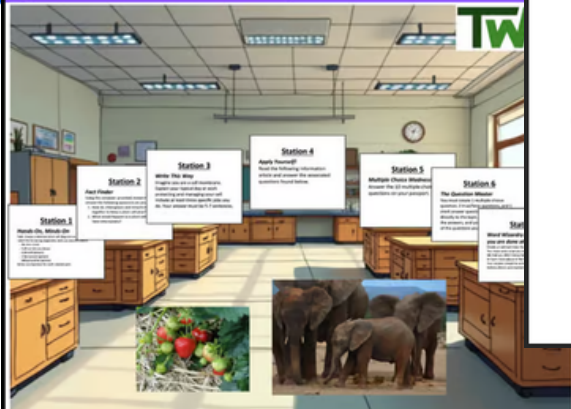
Bill Nye Video Worksheet GENES

- ✓ Two Worksheet Versions – One with a Word Bank and one without
- Word Search of Key Subject terms
- Full Editable Word, PDF, and Google Doc versions
- Print-Ready & Digital



Teach With Fergy

Asexual and Sexual Reproduction NGSS-MS-LS3-2 Station Activity



Teach With Fergy

Create-a-Creature Reproduction Models

Learning Outcome:
Students create and use a model to visualize how sexual reproduction results in genetic variation, while asexual reproduction creates clones.

Objective: Students will model both asexual and sexual reproduction to compare genetic outcomes.

Materials:

- Colored pencils or markers
- A coin (for sexual reproduction chance)
- Tract chart (provided below)

Instructions:

Part 1 – Asexual Reproduction (Cloning)

- Draw a "parent creature" and assign it the following traits:
 - Eye color (blue or green)
 - Body color (red or yellow)
 - Number of legs (2 or 4)
 - Tail type (or not)
- Draw a smaller offspring creature as a genetic copy of the parent (same traits).

Part 2 – Sexual Reproduction

- Use the tract chart below to assign traits from two parent creatures.
- Flip a coin to decide which trait is inherited from which parent.
 - Heads = Parent A's trait
 - Tails = Parent B's trait
- Draw the new creature with the mixed traits.

	Parent A	Parent B
Eye Color	Blue	Green
Body Color	Red	Yellow
Number of Legs	2	4
Tail	Yes	No

Wrap-Up Questions:

- What was the key difference between the asexual and sexual offspring?
- Which offspring showed more variation? Why?
- Why might variation be helpful for survival?

Crash Course Biology 2.0 #47: Sexual & Asexual Reproduction: How Animals Do

- ✓ Classroom Ready - Just Print and Go!
- ✓ Active Engagement - Keep Students' Attention
- ✓ Direct Video Link Included

WATCH VIDEO



Includes Student Copy and Answer Keys

Teach With Fergy

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 Fergy

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




Punnett Square Practice: Traits in Action

Objective: Use Punnett squares to model how traits are inherited in sexual reproduction and contrast with asexual reproduction.

Materials:

- Pencil
- Punnett square worksheet
- Tract descriptions

Scenario:

In a species of alien creatures:

- Green skin (G) is dominant over purple skin (g). If a G is present, they WILL have green skin. The only way to have purple skin is to be gg.
- Two antennae (A) is dominant over one antennae (a)

Parent Genotypes (Sexual Reproduction):

- Parent 1: GgAa
- Parent 2: GgAa

Instructions:

- Complete Punnett squares for each trait:
 - Skin color (Gg x Gg)
 - Antennae number (Aa x Aa)
- Record the possible genotype combinations (i.e. Gg, GG, gg, Aa, AA, aa) and phenotype percentages (how many will have green skin, etc.).
- Compare these results to an asexual parent with genotype GgAa.
 - What would the offspring look like in asexual reproduction?

Wrap-Up Questions:

- How many possible combinations were there in sexual reproduction?
- What is the outcome for asexual reproduction?
- Which type of reproduction shows more variation?

The Standard is Explained and the Resources it Incorporates are Outlined

Next Generation Science Standards Package MS LS3 Heredity: Inheritance and Variation of Traits

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-LS3-2. Develop 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. [Clarification Statement: Emphasis is on using models such as Punnett squares, diagrams, and simulations to describe the cause-and-effect relationship of gene transmission from parent(s) to offspring and resulting genetic variation.]

Resources:

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How Traits Are Passed On: Asexual vs Sexual Reproduction 6th, 7th, 8th Grade Lesson

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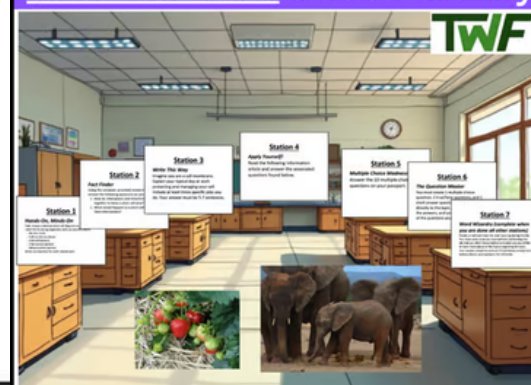
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Asexual and Sexual Reproduction NGSS-MS-LS3-2 Station Activity



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**