

Fungi, Mold & Growth Conditions

Mold Maze with Wriggling

Learning target

Use supplied evidence to explain conditions that support microbial growth.

Before you begin

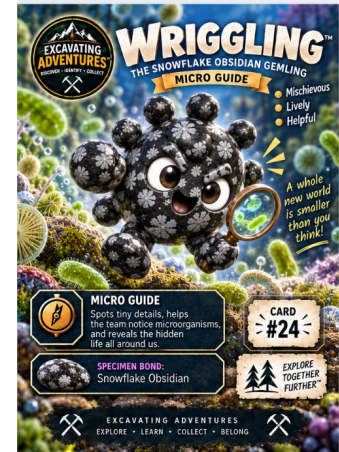
Use the reference page and discussion prompts on their own, or open the optional browser adventure. No earlier lesson or physical kit is required.

For online play: use an internet-connected current browser with local storage enabled. Read the three-part Gemling briefing, answer the quick check, and apply the evidence at three checkpoints. Retry feedback supports review; results are not a secure test or gradebook.

Use for teacher-led review, science centers or partner practice. Independent readers may need support with the vocabulary below. The design target is grades 3-5; choose support based on the learner.

Vocabulary and concepts to discuss

Molds and yeasts; fungi; moisture; food sources; growth



Open Mold Maze - direct lesson link

Scan the QR code or use the clickable link. This guide is usable offline; the adventure runs on an external educational website.



Fungi, Mold & Growth Conditions - key ideas

1. Fungi and their conditions

Molds and yeasts are fungi. Many need suitable moisture, food and other conditions to grow, though their needs vary.

2. Make a fair comparison

Keep other conditions alike when comparing one factor. Here the fictional records have the same food, temperature and elapsed time; moisture is the factor that differs.

3. Supplied evidence: fictional classroom model

Condition or result	Sample A	Sample B
Moisture	Moist	Dry
Food, temperature, time	Same as B	Same as A
Growth shown in model	More growth	Less growth

The model illustrates a moisture effect in this comparison. These are invented qualitative labels, not photographs, measured results or a growth recipe. They do not show that all microbes grow alike.

Keep the science accurate

Use only supplied models and prepared media. Do not touch mold or grow unknown samples. Viruses are not cellular organisms. Microbes have diverse roles; they are not all harmful.

Apply the evidence

Identify the one condition that differs. Point to the more-growth label and explain why this comparison does not describe every microorganism.

Science background: EPA, A Brief Guide to Mold, Moisture and Your Home ([epa.gov/mold](https://www.epa.gov/mold)). Curriculum reference: NGSS MS-LS1, Molecules to Organisms.

Talk through the evidence

1. What group includes molds and yeasts?

Expected answer: Fungi

Reasoning: Molds and yeasts belong to fungi. Members can differ in structure and growth conditions.

2. Which condition differs in the supplied comparison?

Expected answer: Moisture

Reasoning: Food, temperature and elapsed time are alike in the model. Sample A is moist and Sample B is dry.

3. Which sample shows more growth in the classroom model?

Expected answer: The moist sample

Reasoning: Sample A is moist and has the more-growth label. The model supplies that information; no missing photographs or measurements are required.

4. What conclusion fits?

Expected answer: Moisture affected growth in this record

Reasoning: Moisture is the differing factor and the model assigns more growth to the moist sample. This is the intended explanation of the fictional model, not a measured experimental finding or a rule for all microbes.

Guide the discussion

Have learners name the differing condition and cite the labels in the table on page 2. Ask which conditions were held alike and what this model cannot establish. Keep the activity on screen or paper; do not create or handle samples.

Online rewards: this lesson grants one fixed digital Expedition Discovery. Five saved digital Gemling friends become available only after all six distinct subject lessons are complete, in any order. Digital rewards do not establish physical ownership.