Biology Lab of Horrors

How can a creepy exhibit teach real biology?

A five-day student-created science museum

SPECIMEN

Real science

Fictional horror

Solo or partner exhibits
50-point project + separate 10-point evaluation

The museum challenge

Build a small handmade model that visitors can understand.

Use four accurate facts and four biological labels.

Explain the science and clearly mark the fictional horror.

Finish your display by the end of Day 4.

Nine exhibit choices

Cells and inheritance

1 The Organelle Asylum

2 The Microbial Graveyard

3 The Anatomy Crypt

4 The Mutation Station

Tissues and adaptations

5 The Diseased Tissue Gallery

6 The Cell Death Cemetery

7 The Carnivorous Greenhouse

8 The Biological Ooze Collection

9 Nature’s Monsters

Five-day schedule

Day 1	Research, sketch, and teacher approval
Day 2	Build most of the model
Day 3	Draft and check four labels in 35 minutes
Day 4	Museum card, peer review, and final setup
Day 5	Gallery walk, reflection, and celebration

Facts and fiction

Real science

Four verified facts

Labels that explain structures or changes

A 3–5-sentence explanation

Fictional horror

A title and imagined backstory

A warning clearly marked as fiction

Decorations connected to the biology

Research that supports the model

Begin with the reference card for your chosen category.

Use a linked reading or textbook as your second source.

Record titles, organizations, and URLs or page numbers.

Paraphrase four facts and identify which source supports each.

A label explains a feature

Name only

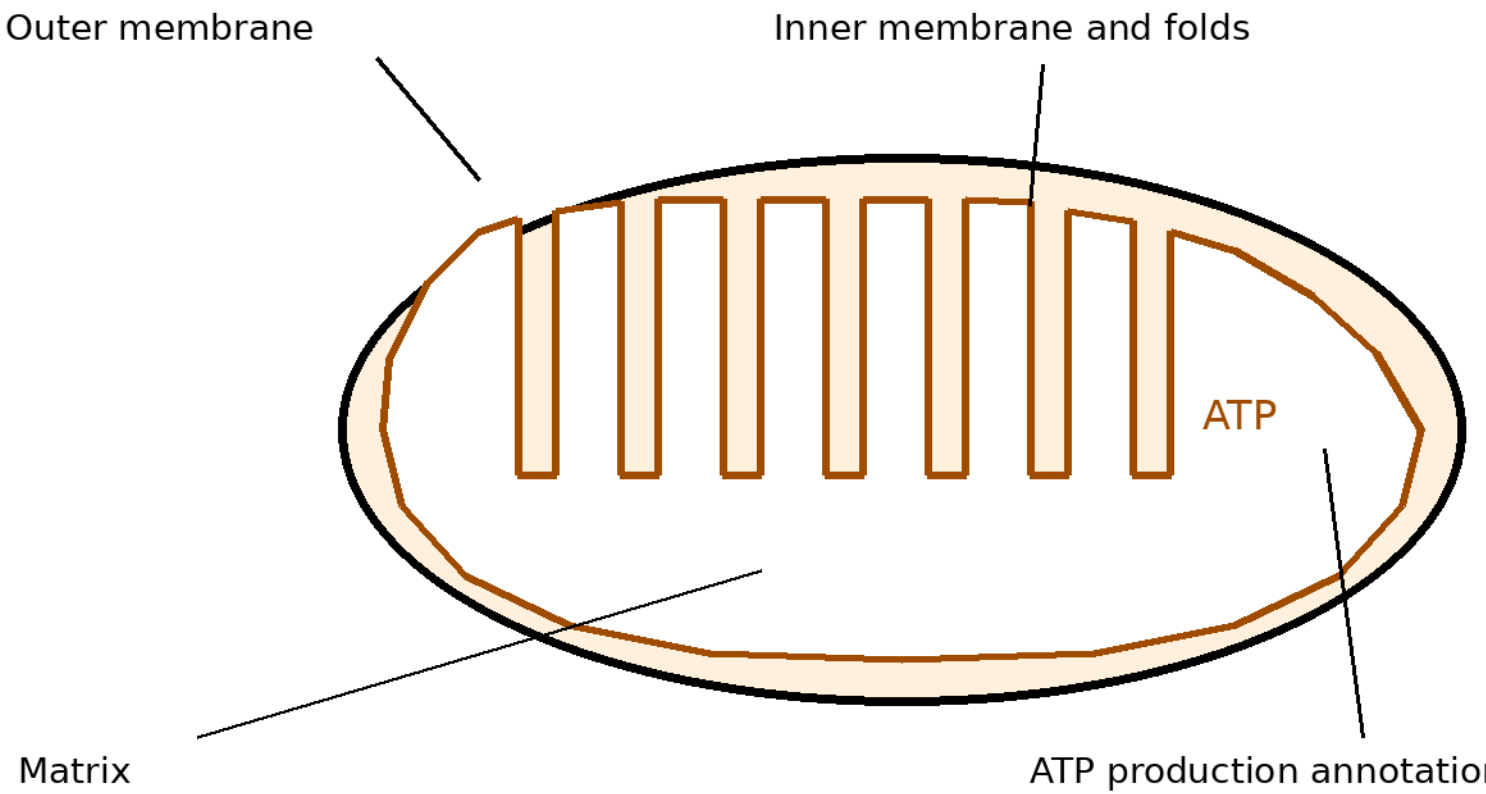
Inner membrane

Name and biological meaning

Inner membrane
Folds provide surface for proteins involved in ATP production.

Your exhibit needs four useful labels or annotations.

Worked example



Simplified model plan, not a micrograph or student photograph

The Cell Organelle Asylum

Egg-carton ribosomes represent protein builders. A brain-topped nucleus houses genetic instructions. The energy vampire represents mitochondrial ATP production, while the hungry lysosome represents breakdown and recycling.



Monster personalities are fictional analogies.

Bicephaly Two Heads, One Body

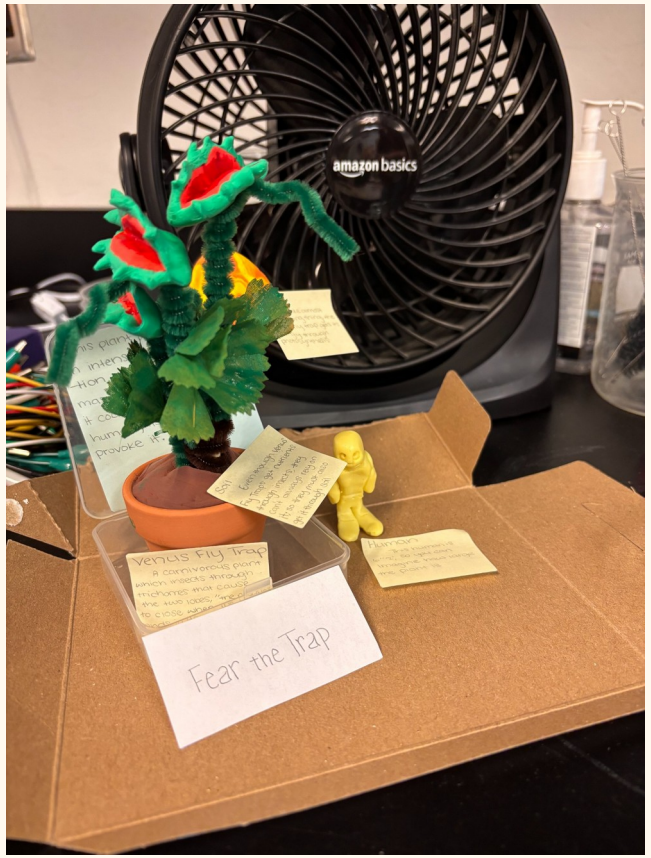
Each head can respond independently to sensory information. Chemical cues help locate prey, but the heads may compete over food or attempt to move in different directions.



Coordination can be difficult even when both heads sense cues.

The Carnivorous Greenhouse

Modified leaves and trigger hairs help real flytraps capture prey. Insects supply nutrients such as nitrogen. Photosynthesis still makes sugars. The oversized traps add a fictional horror twist.



Real Venus flytraps cannot eat people.

Tissue Culture Gone Wrong

These simulated dishes tell the fictional story of an attempt to grow human tissues, including bone. Real living cells require controlled conditions, and organized tissues are much more complex than a dish of cells.



These are craft models, not actual tissue cultures.

The Midnight ATP Factory

Real biology	Clearly fictional
Two membranes	A noisy midnight factory
Folded inner membrane	Ghost cells as visitors
Matrix inside the inner membrane	An imaginary warning

Safety and materials

Use clean paper, cardboard, clay, and plastic containers.

Use simulated microbes and tissues made from craft materials.

Keep sealed containers closed and materials out of mouths.

Share supplies, label storage trays, and clean your workspace.

Day 1 Research and design

Choose your category and a manageable biology question.

Collect four facts from two sources.

Sketch the model with four planned biological features.

List materials and get approval before construction.

Day 2 Main construction

Build the biological structures before extra decorations.

Check that each material represents something meaningful.

Ask your partner to explain the model without your help.

Store your exhibit with names and class period.

Day 3 Labels that explain biology

35-minute class

Choose four biological features on your model.

Write the real name and explain each feature.

Check facts, revise, and place the labels.

Day 4 Museum preparation

Complete the card and mark the backstory as fiction.

Ask a peer to check facts, labels, and model accuracy.

Make corrections and rehearse a 30-second explanation.

Leave every graded display component ready for tomorrow.

Project and individual grades

15	Scientific accuracy	10	Research submission
10	Biological model	5	Museum card
5	Explained labels	5	Creative science connection

Project: 50 points Individual work: 10 separate points

Day 5 Museum showcase

Visit three exhibits and record a specific fact from each.

Explain how one model feature helped you understand.

Complete your private contribution and peer checklists.

Return materials and celebrate the completed museum.

Final readiness check

Can visitors identify four biological features?

Does the explanation match the model and sources?

Can each partner explain what is real and what is fictional?

Have you completed the research sheet and museum card?

Student choice awards

Mad Scientist Masterpiece

Creative Halloween design connected to real biology

Science That Sticks With You

A model and explanation that helped you understand

Station 9 Nature’s Monsters

Choose a real organism with an unusual adaptation.

Explain how it survives, captures prey, or uses a host.

Model four features and connect each to its function.

Begin with Reference Card 9. Mark invented horror as fiction.

Absent student choice board

Choose ONE format and ONE biology topic from file 07.

Formats: case file, comic, slides, field guide, news, or comparison.

Use two sources, four facts, and four explained model features.

Follow its checklist. Project 50 points + individual work 10 points.