

CELL • EBRATION OF LIFE

Chapter 1 – Cellology | B2 | 9th Grade

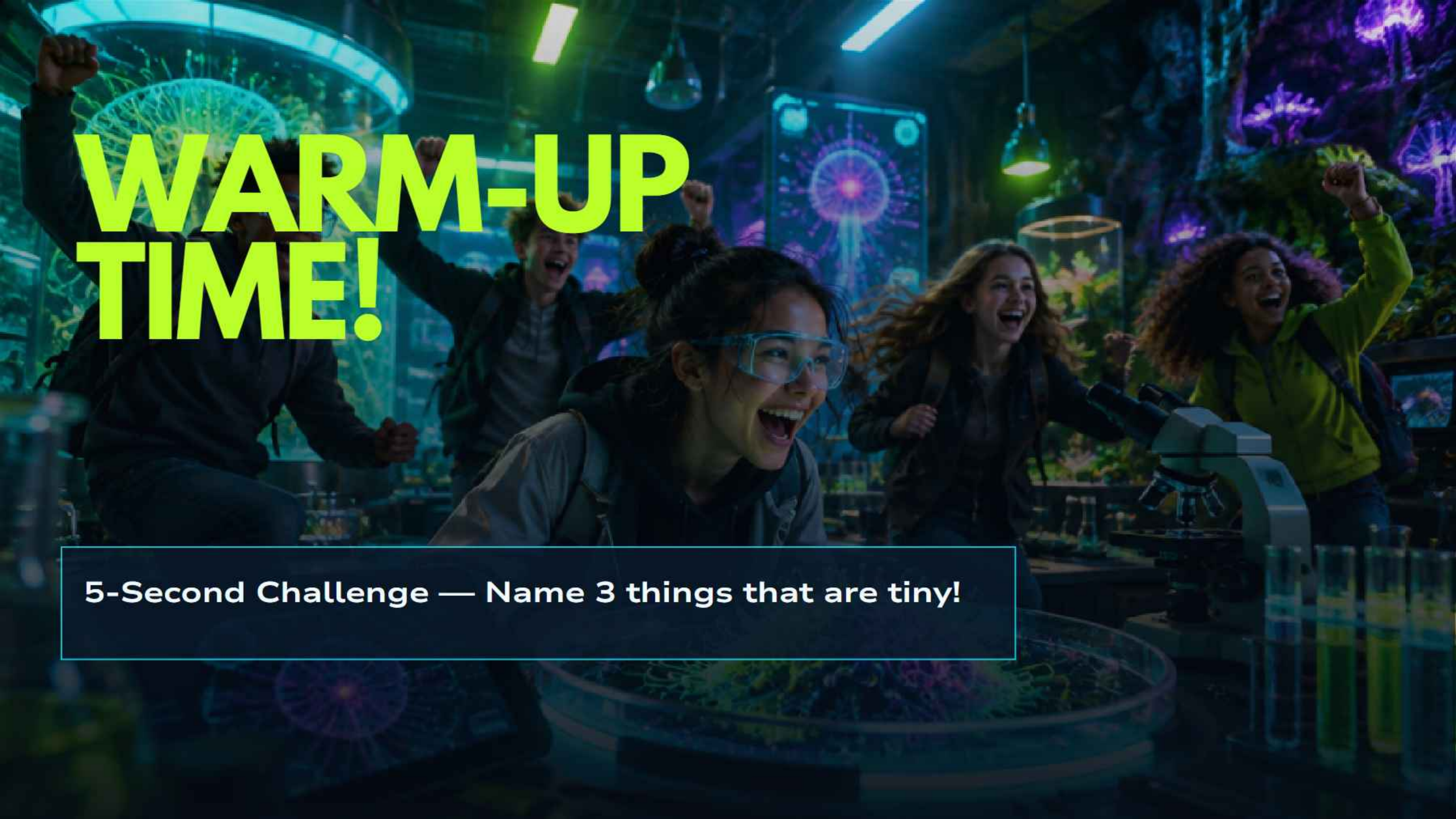
4 SESSIONS



TODAY'S MISSION

- Understand what a cell is
- Learn the 3 basic parts of every cell
- Use scientific analogies like a pro



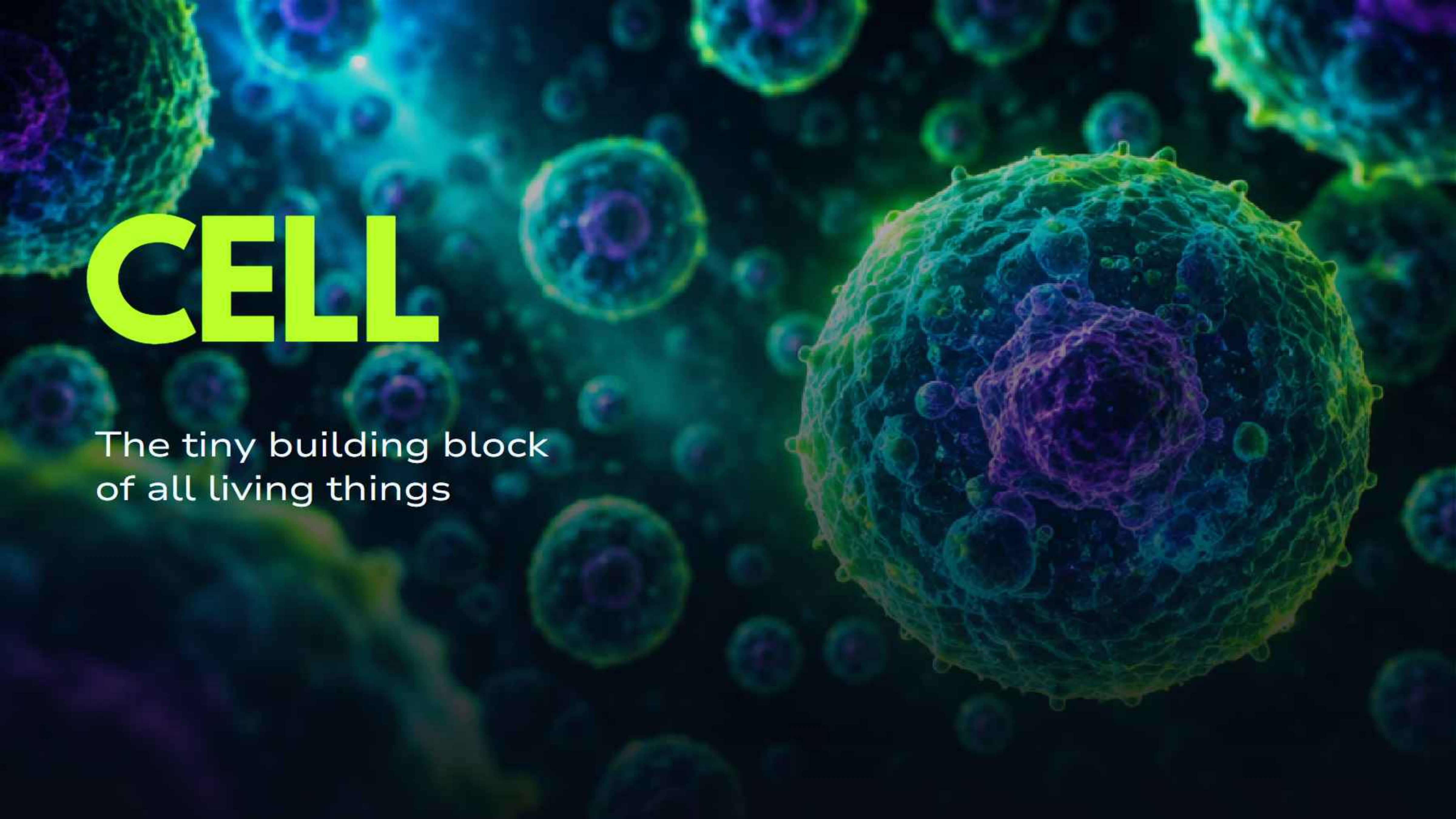
A group of diverse students are celebrating in a science laboratory. They are wearing backpacks and safety goggles, with their arms raised in excitement. The lab is filled with various scientific equipment, including petri dishes, test tubes, and a microscope. The background features large, glowing petri dishes and a digital display showing a molecular structure. The overall atmosphere is one of joy and discovery.

WARM-UP TIME!

5-Second Challenge — Name 3 things that are tiny!

CELLS = THE BUILDING BLOCKS OF LIFE



A microscopic view of various cells, likely from a tissue sample. The cells are stained, showing different internal structures. A large cell with a prominent nucleus is in the foreground on the right. Other cells are visible in the background, some with distinct nuclei and others with more diffuse staining. The overall color palette is dominated by blues, greens, and purples.

CELL

The tiny building block
of all living things

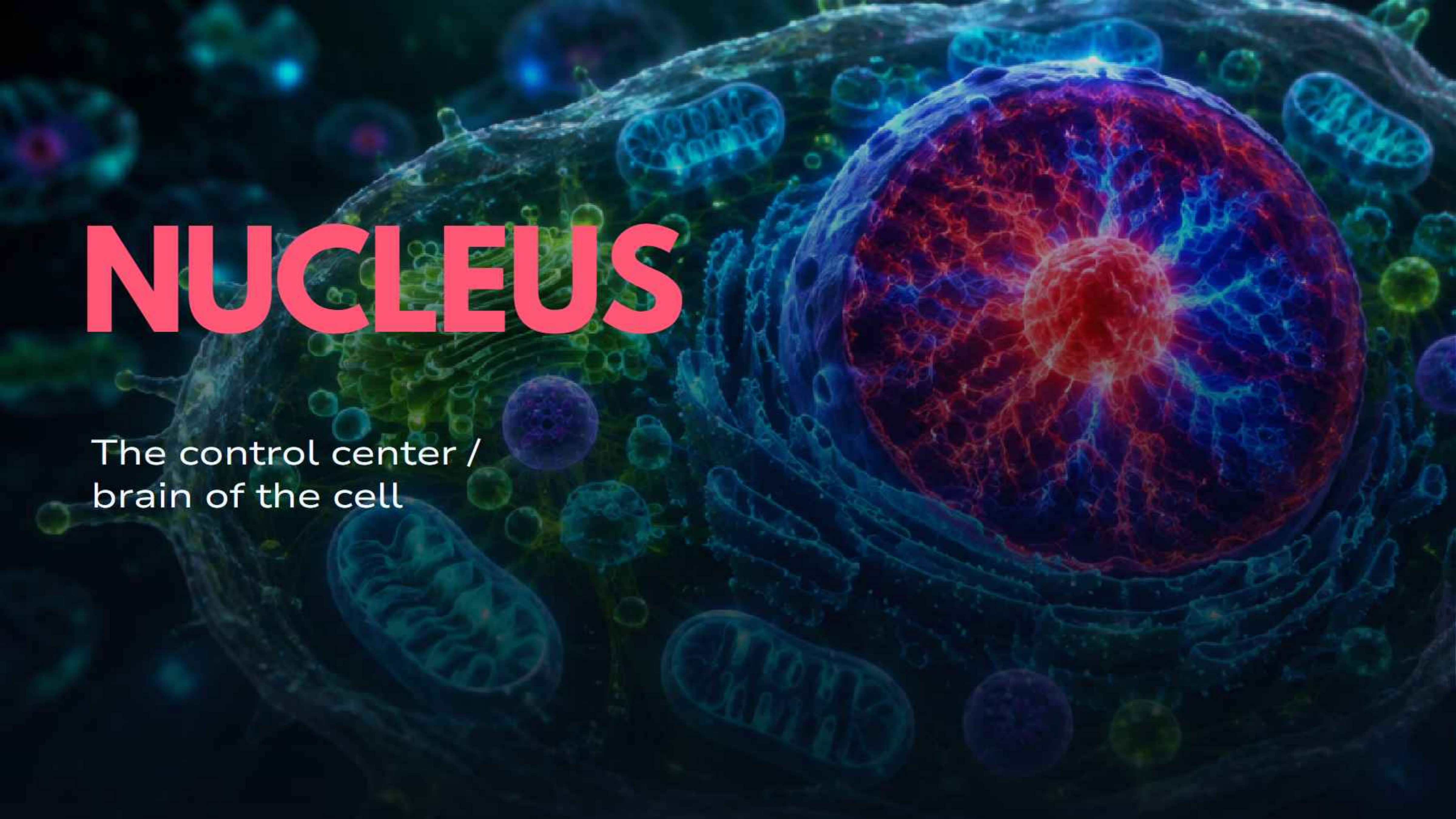


CELL MEMBRANE

The protective 'skin'
or fence of the cell

NUCLEUS

The control center /
brain of the cell

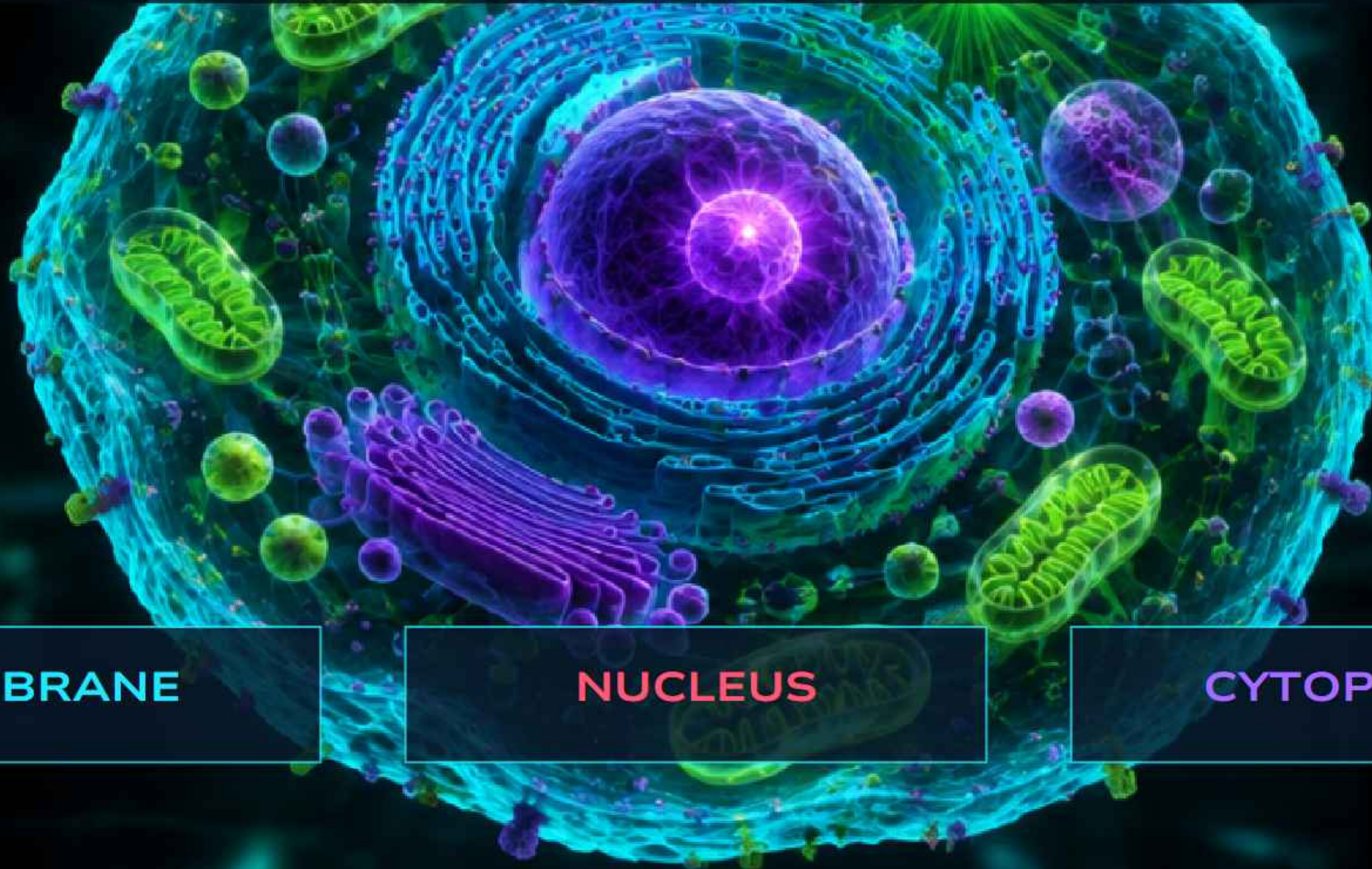




CYTOPLASM

The jelly filling that holds everything together

THE 3 MAIN PARTS



MEMBRANE

NUCLEUS

CYTOPLASM

TRUE / FALSE RACE

Run to the correct wall!

CELL ARCHITECT



Explain your cell to a client
using 4 target phrases!

TYPES OF CELLS

Session 2 – Cell Types | B2 | 9th Grade

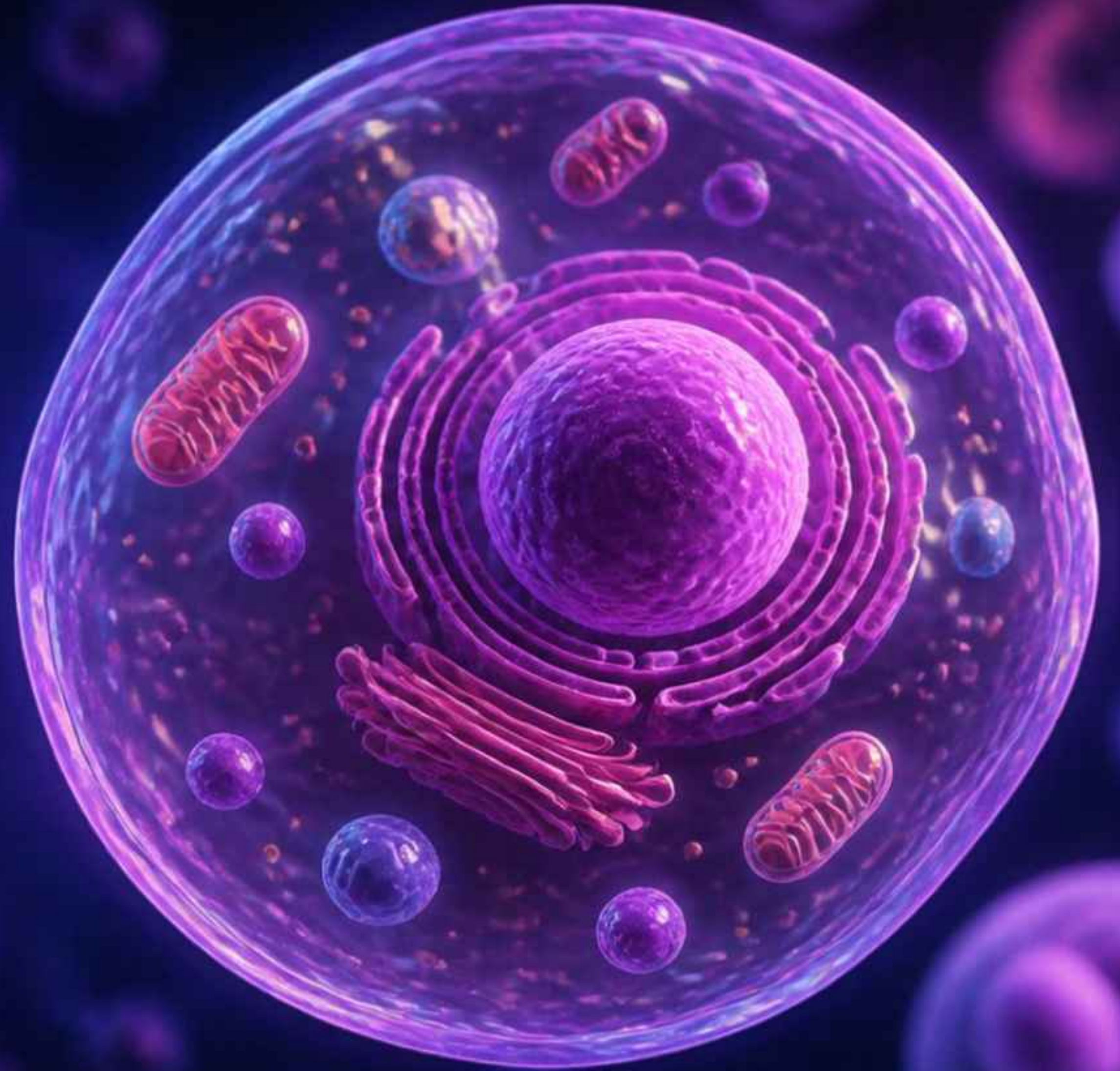
4 SESSIONS



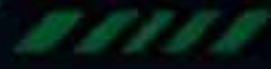
PLANT CELL



ANIMAL CELL



VOCABULARY



BACTERIAL CELL

Simple • No nucleus





VOCABULARY

CELLULOSE

The woody substance that
makes plant cell walls strong

COMPARE CELL TYPES

	Animal	Plant	Bacteria
 Size	10–100 micrometers	10–100 micrometers	0.5–5 micrometers
 Nucleus	Yes	Yes	No
 Cell Wall	No	Yes	Yes
 Mitochondria	Yes	Yes	No
 Chloroplasts	No	Yes	No
 Vacuole	Small or few	One large central vacuole	No
 Shape	Often irregular or round	Often box-shaped or regular	Rod, sphere, or spiral
 Example	 Human cell	 Leaf cell	 E. coli

SORTING RACE -

Which cell am I?



**Name one part
of a cell and
its job.**



ALIEN SCIENTIST ROLE-PLAY

Explain why
Earth cells are
different!



QUICK QUIZ

01

**ORAL QUESTION 1:
PLACEHOLDER FOR TEACHER**

02

**ORAL QUESTION 2:
PLACEHOLDER FOR TEACHER**

03

**ORAL QUESTION 3:
PLACEHOLDER FOR TEACHER**



SESSION 2

Great work, biologists!

