

Cell कौशिका

Cell theory कौशिका सिद्धान्त

① श्लिडन और श्वान ने दिया था

[Schlieden & Schwann] [1838-1839] ✓

॥
[पादप Plant]

"कौशिका से बने हैं"
Made up of cell

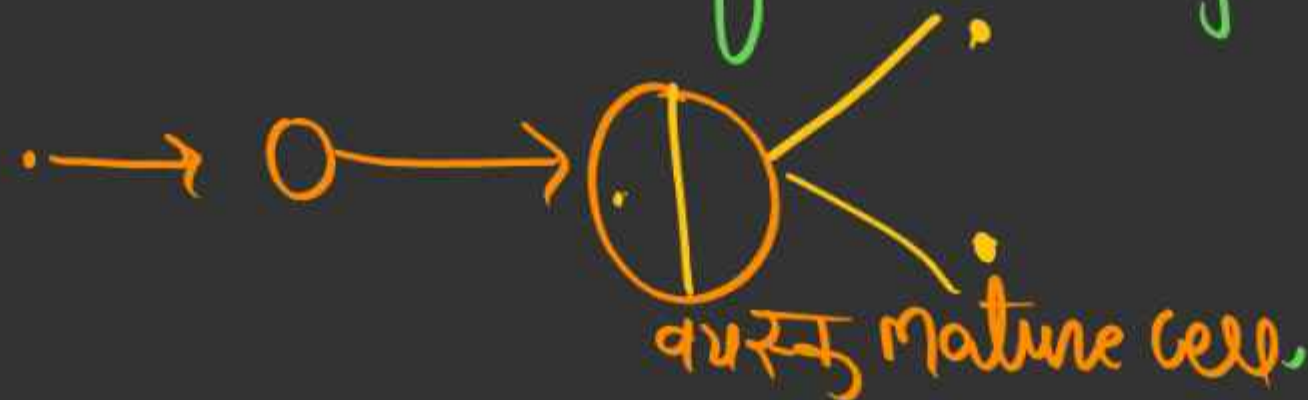
॥
जंतुओं का शरीर कौशिका से बना होता है

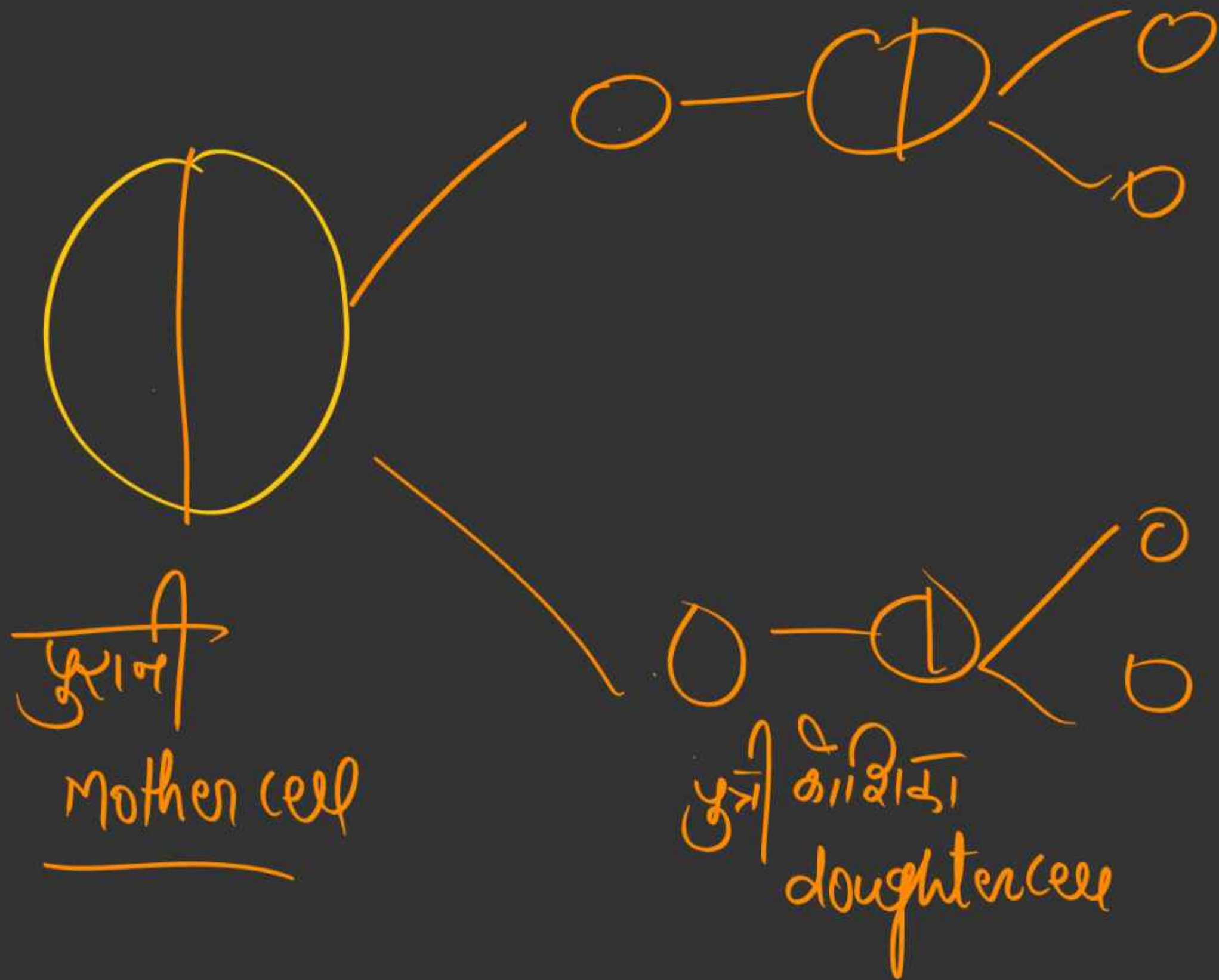
Animals also made up of cell

⇒ Rudolf Virchow
रुडोल्फ वर्चोव

Omnis-cellula-e-cellula

अर्थ → पुरानी कोशिकाओं से नयी कोशिकाएँ उत्पन्न होती हैं
Meaning New cell are formed by pre existing cell





Micrographia
माइक्रोग्राफिया

⇒

Book
किताब

→ Robert Hooke
रोबर्ट हुक

कोशिका के प्रकार types of cell

Prokaryotic cell
प्राचीन (अकेन्द्र कोशिका)

⇒ यह प्राचीन कोशिका है

It is primitive

⇒ (1) केन्द्रक नहीं पाया जाता है
Nucleus is Absent

⇒ (2) DNA सर्पिलाकार होता है
Circular DNA

Eukaryotic cell
सकेंद्र कोशिका

यह विकसित कोशिका है

It developed cell

(1) केन्द्रक पाया जाता है
have Nucleus

(2) DNA रैखित होता है DNA is linear

Pro

③ Ribosome
रिबोसोम $\Rightarrow$ 70S

④ DNA पर हिस्टोन प्रोटीन
नहीं होती हैं

DNA without Histone
Protein

⑤ मिनोप्लस्मा कोशिकांग नहीं
होते हैं Membrane bounded
organelles are Absent

Euk

Ribosome 80S
रिबोसोम $\Rightarrow$ 80S

④ DNA पर हिस्टोन पायी जाती हैं
DNA with histone

⑤ सभी पाये जाते हैं
All are present

Pro

उदाहरण

Ex ⇒ ① जीवाणु
Bacteria

② आर्चीजीवाणु
Archaeobacteria

③ नीली हरी शैवाल
Cyanobacteria

Euk

उदाहरण

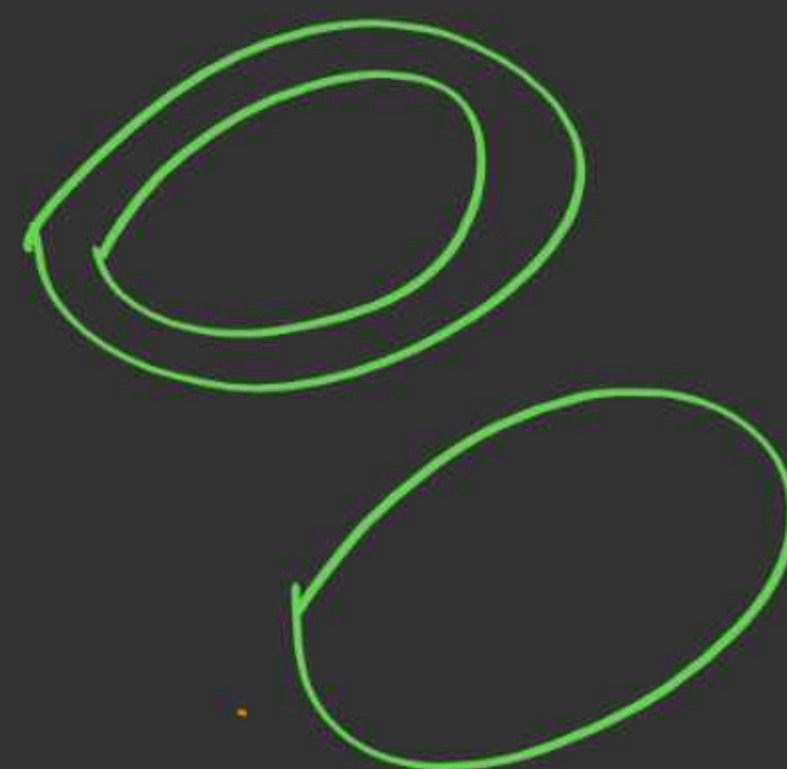
Ex ⇒ (अमीबा, यूग्लिना, पैरामीशियम)
Amoeba, Euglena, Paramecium

↓

बहुकोशिकीय ⇒ पौधे plant

② जंतु Animal

कोशिकांग organelles



बिना झिल्ली वाले
Membrane less

- ⇒ राइबोसोम
- ⇒ Centrosome
- lysosome

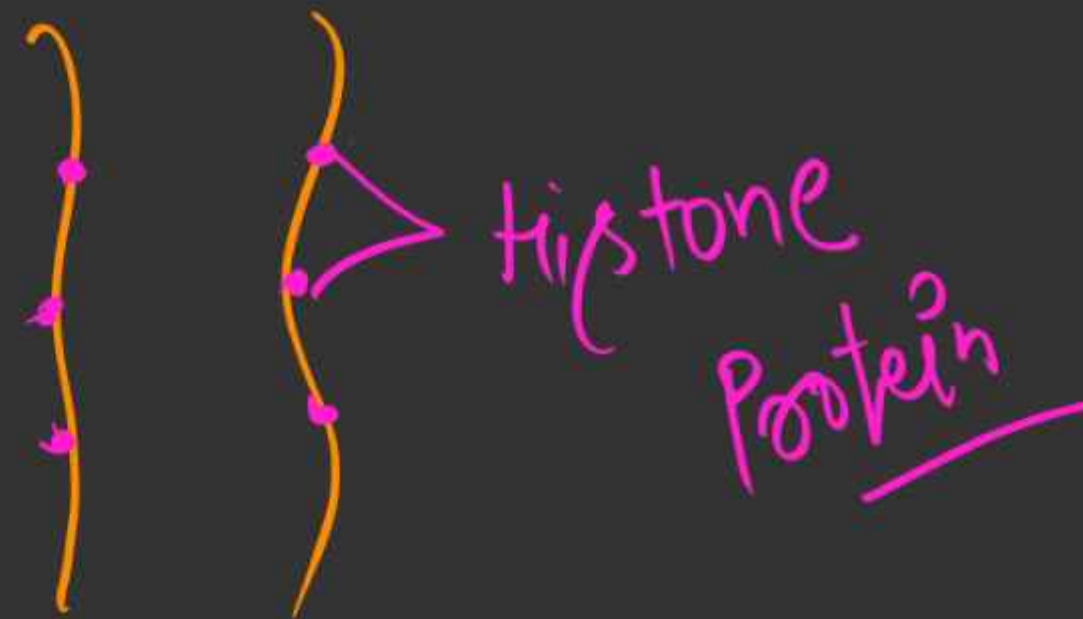
झिल्लीयुक्त
Membrane

दोहरी
Double
 ↳ केंद्रक Nucleus ✓
 ↳ Mitochondria
Plastid लवक

एकल single membrane
 ① E.R
 ② Golgi Body



P_{80}



E_4

Bacteriophage Structure

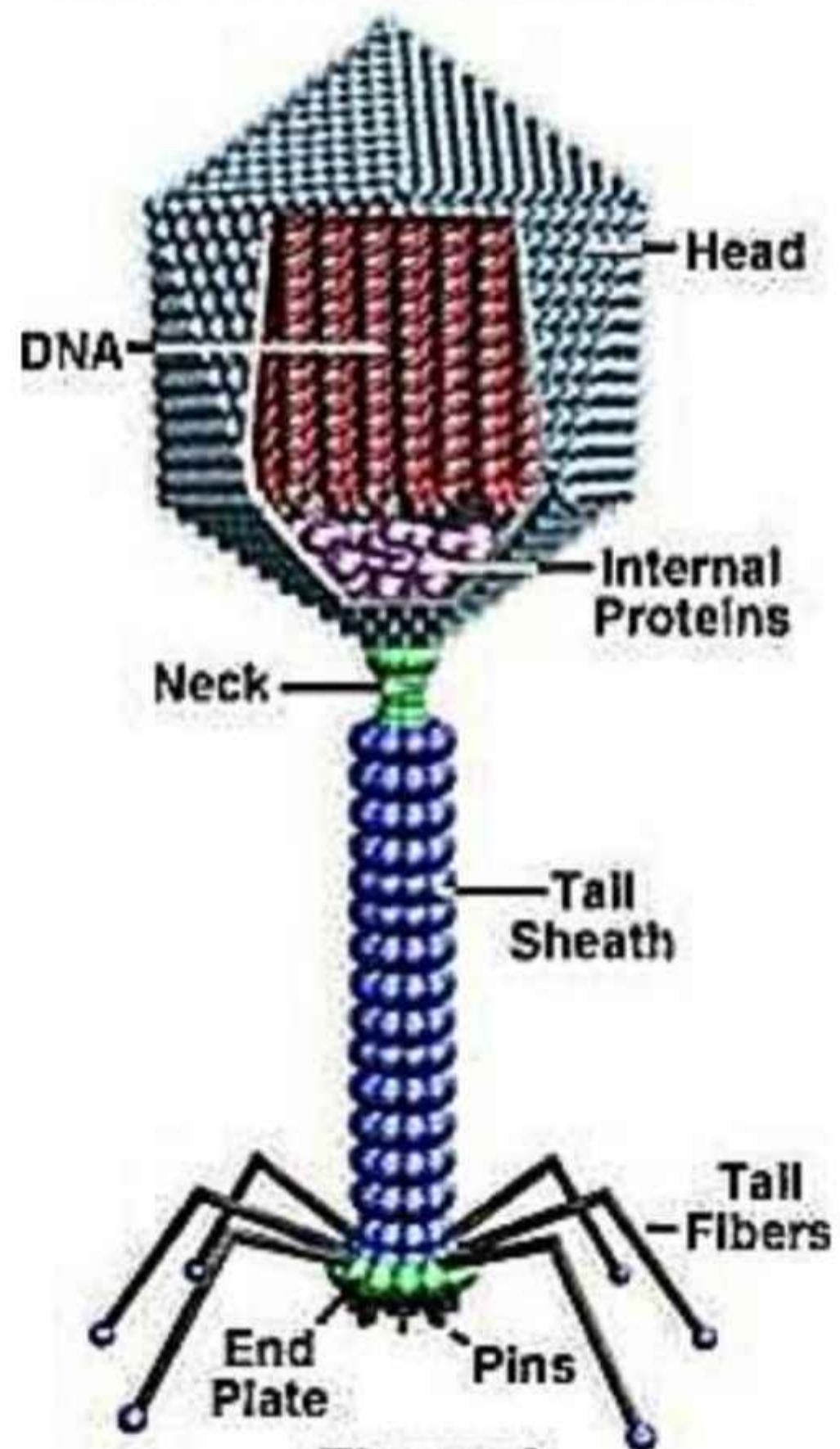
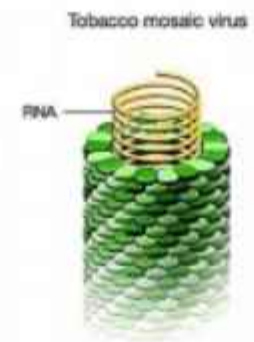
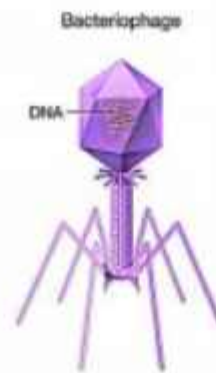
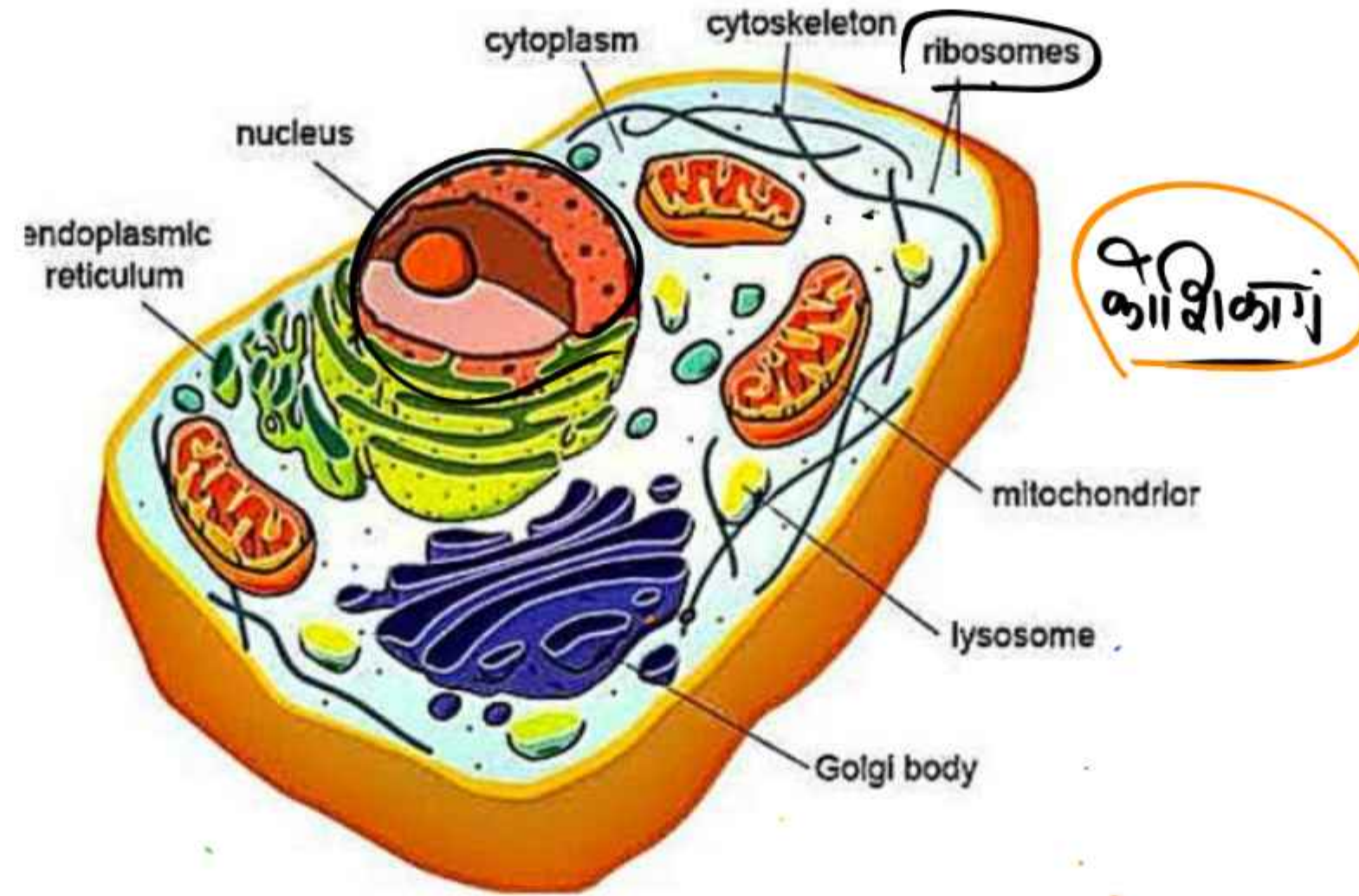
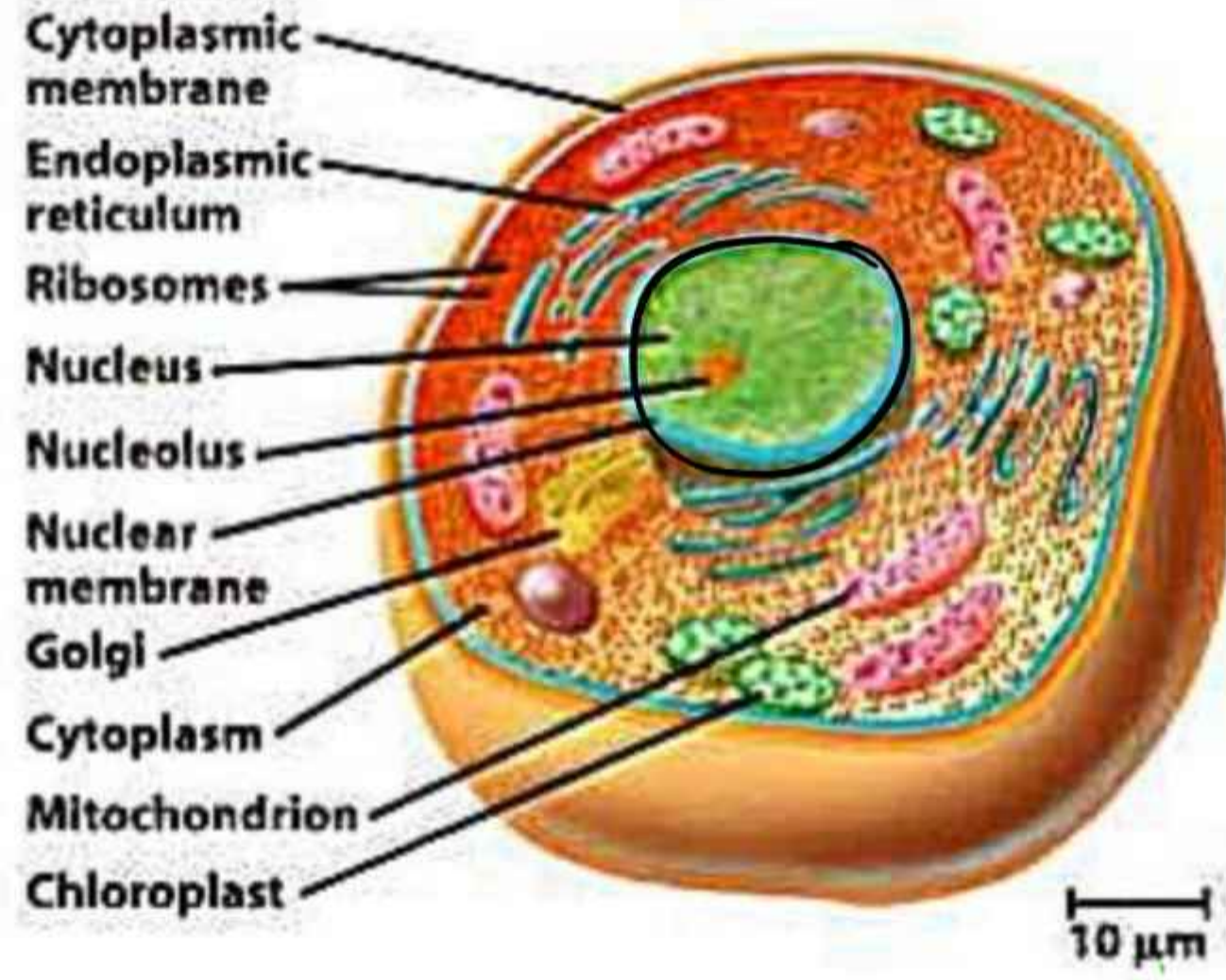


Figure 1

Examples of viruses

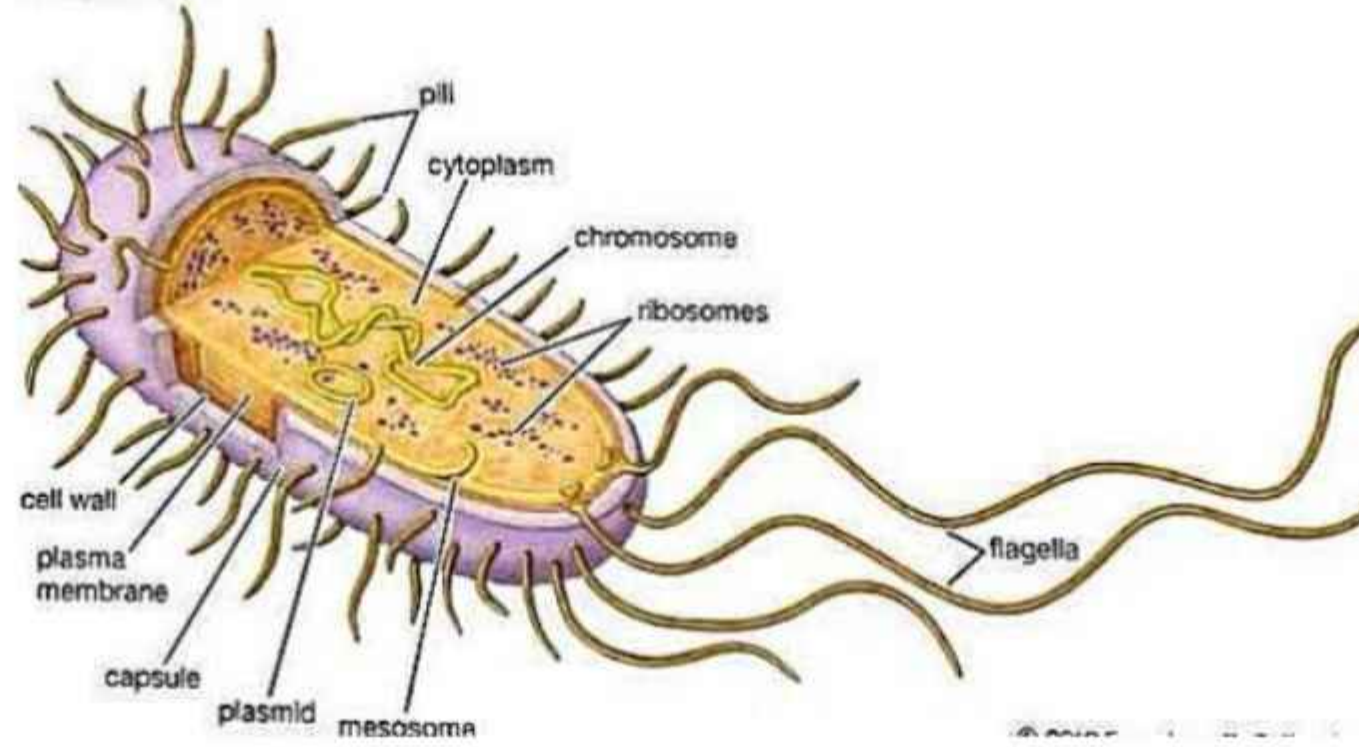


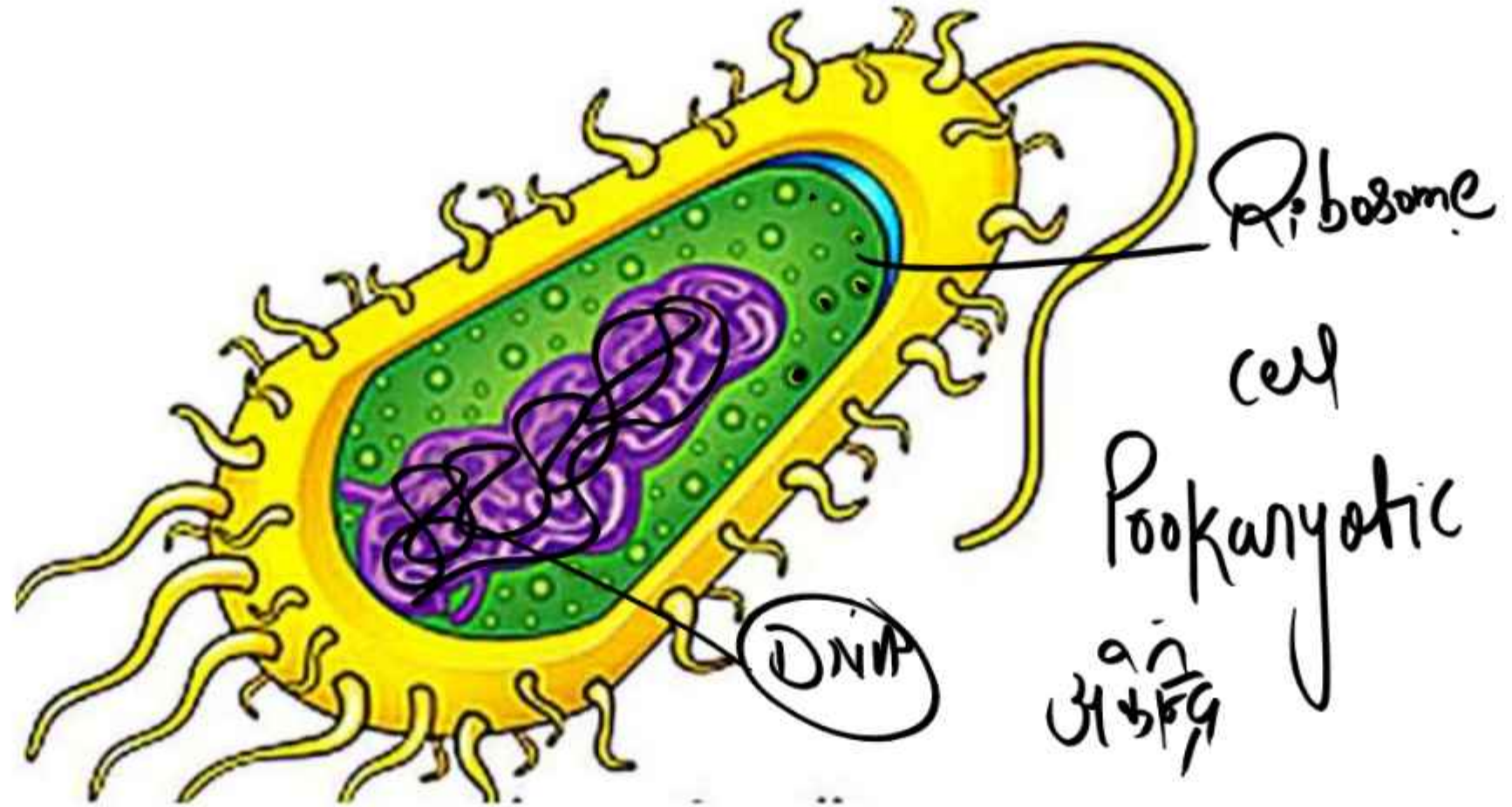


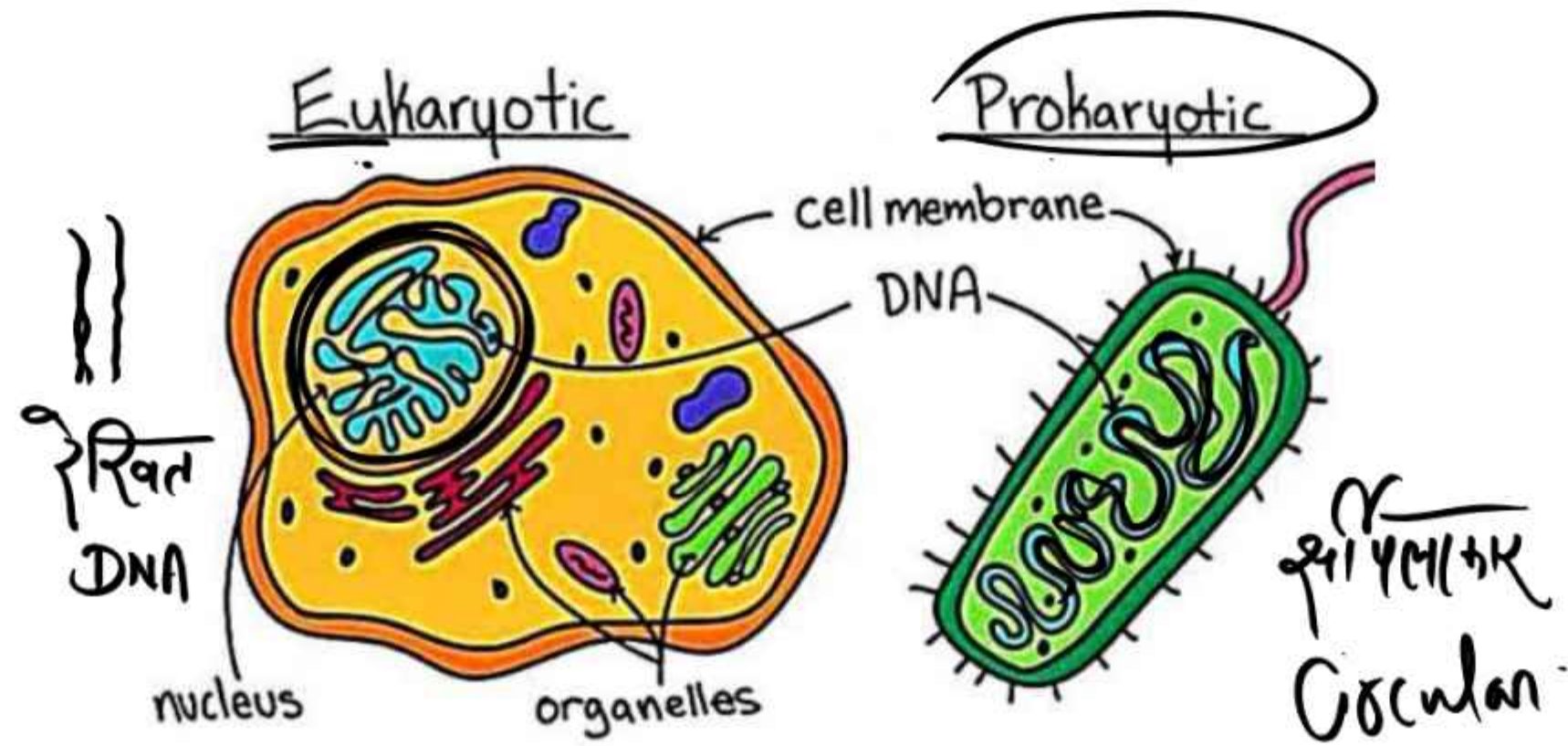


କେ.ଏ.ସି.
युकेरियोटिक
Eukaryotic cell

Bacterial cell

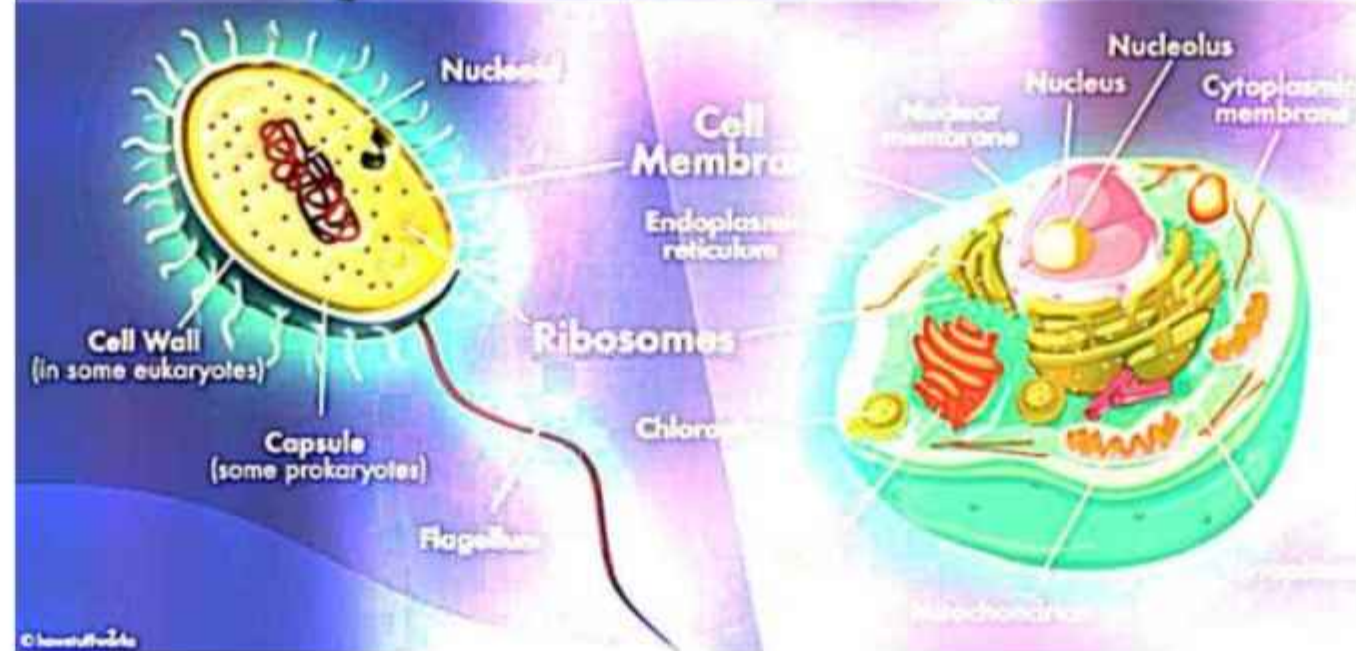






Prokaryotes

Eukaryotes



Cell Theory

The three people to discover the cell theory are:



Matthias
Schleiden

શિલ્ડન



Theodor
Schwann

સ્વાન



Rudolf
Virchow

રુડોલ્ફ
વિરચોવ

રુડોલ્ફ
વિરચોવ

THEORY OF CELLS

- **Matthias Schleiden (1838)**
 - All Plant Parts are Made of Cells
- **Theodore Schwann (1839)**
 - All Animal Tissues are Made of Cells
 - Wrote First two parts of *The Cell Theory*
 1. All Organisms are made of cells
 2. Cell is the Basic Unit of all Living Things
- **Rudolf Virchow (1858)**
 - 3. All Cells Come From Existing Cells

