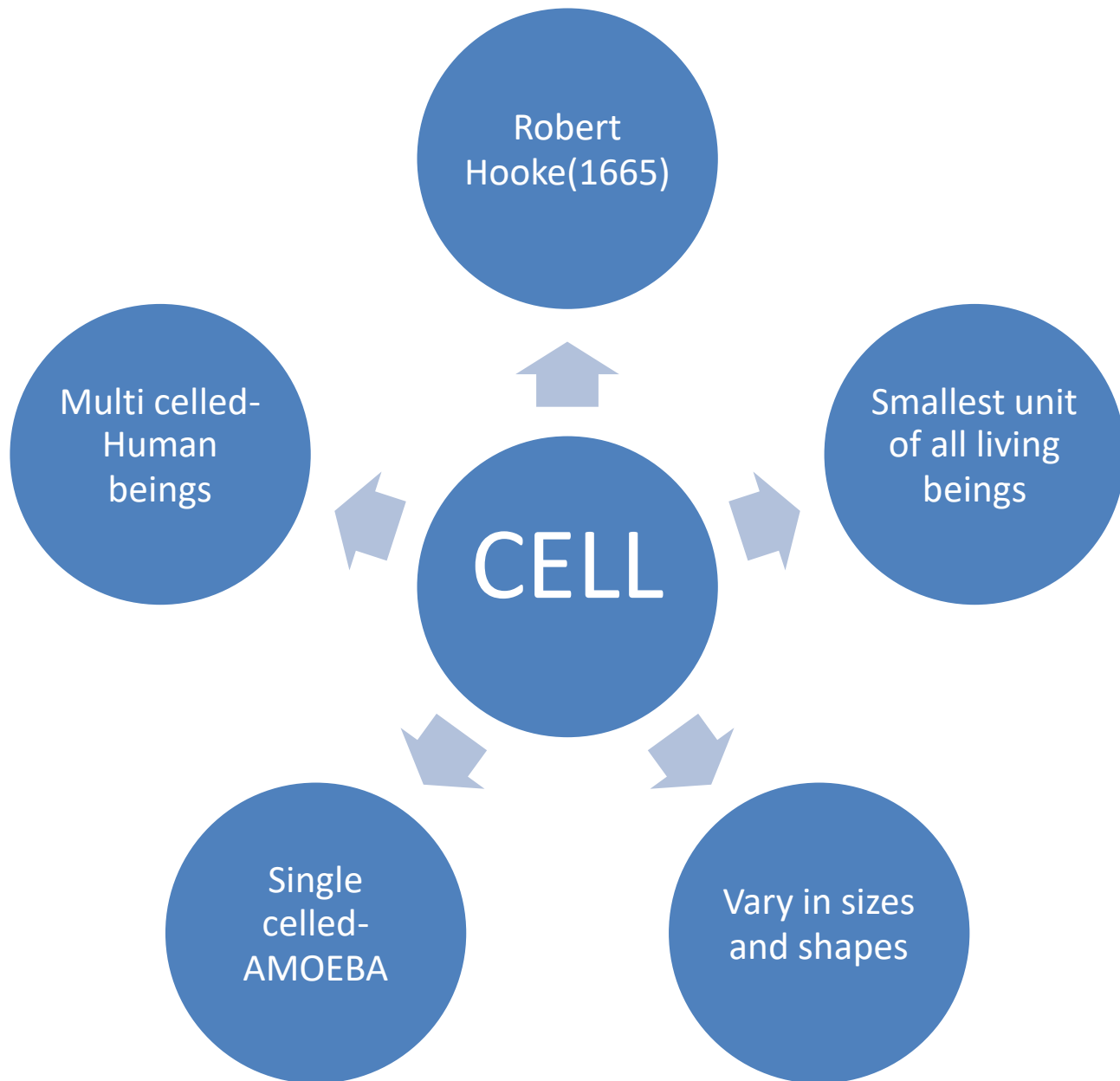


# The Fundamental Unit of Life- CELL

CONCEPT MAP



## Unicellular Organisms

One cell

Short life span

No division of labour

Amoeba

## Multicellular Organisms

Many cells

Long life span

Each cell perform specified function

Plants, Animals

## Prokaryotic cell

Absence of nucleus

Nucleolus absent

Presence of smaller Ribosomes

Bacteria

## Eukaryotic cell

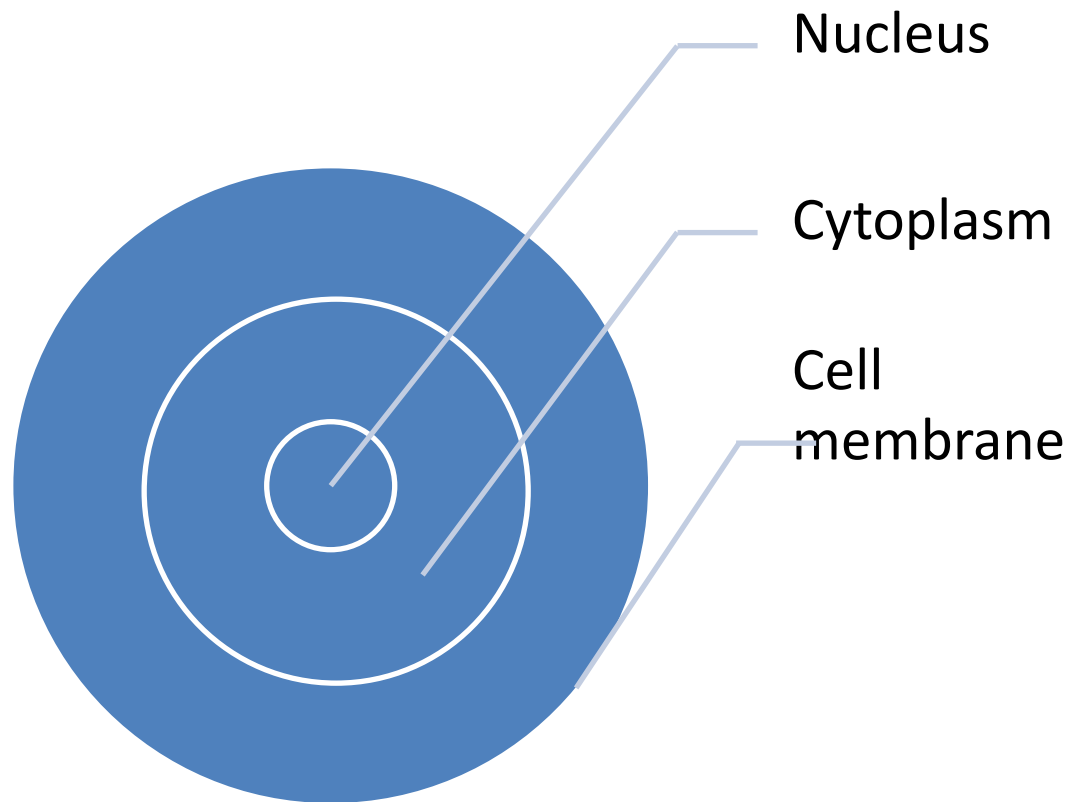
Presence of well defined nucleus

Nucleolus present

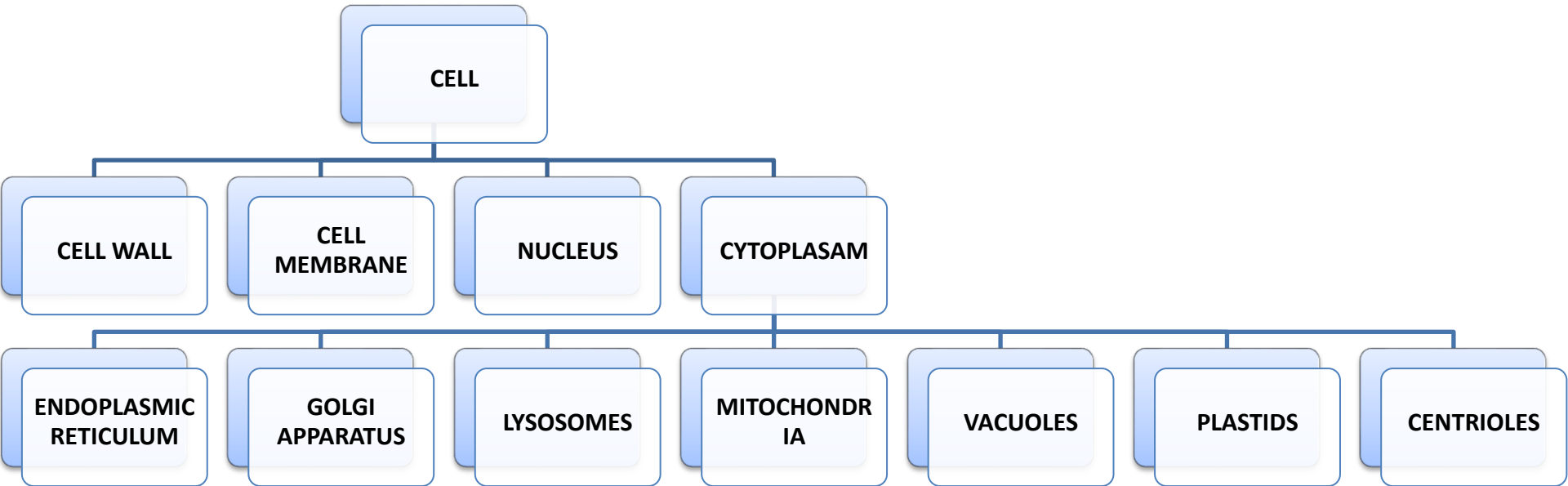
Presence of larger Ribosomes

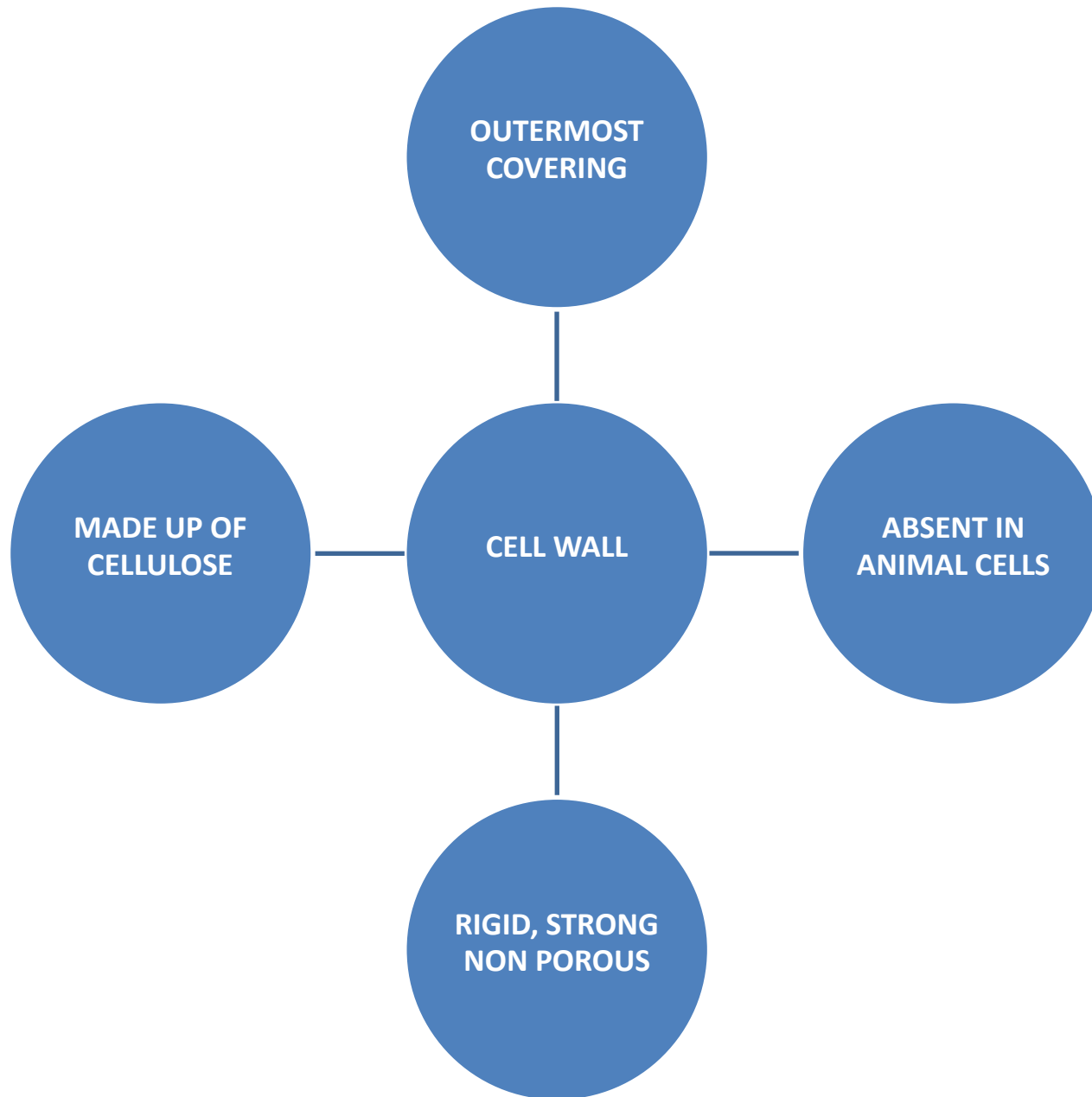
Amoeba

# Organisation of cell



# PARTS OF CELL





## **FUNCTION OF CELL WALL**

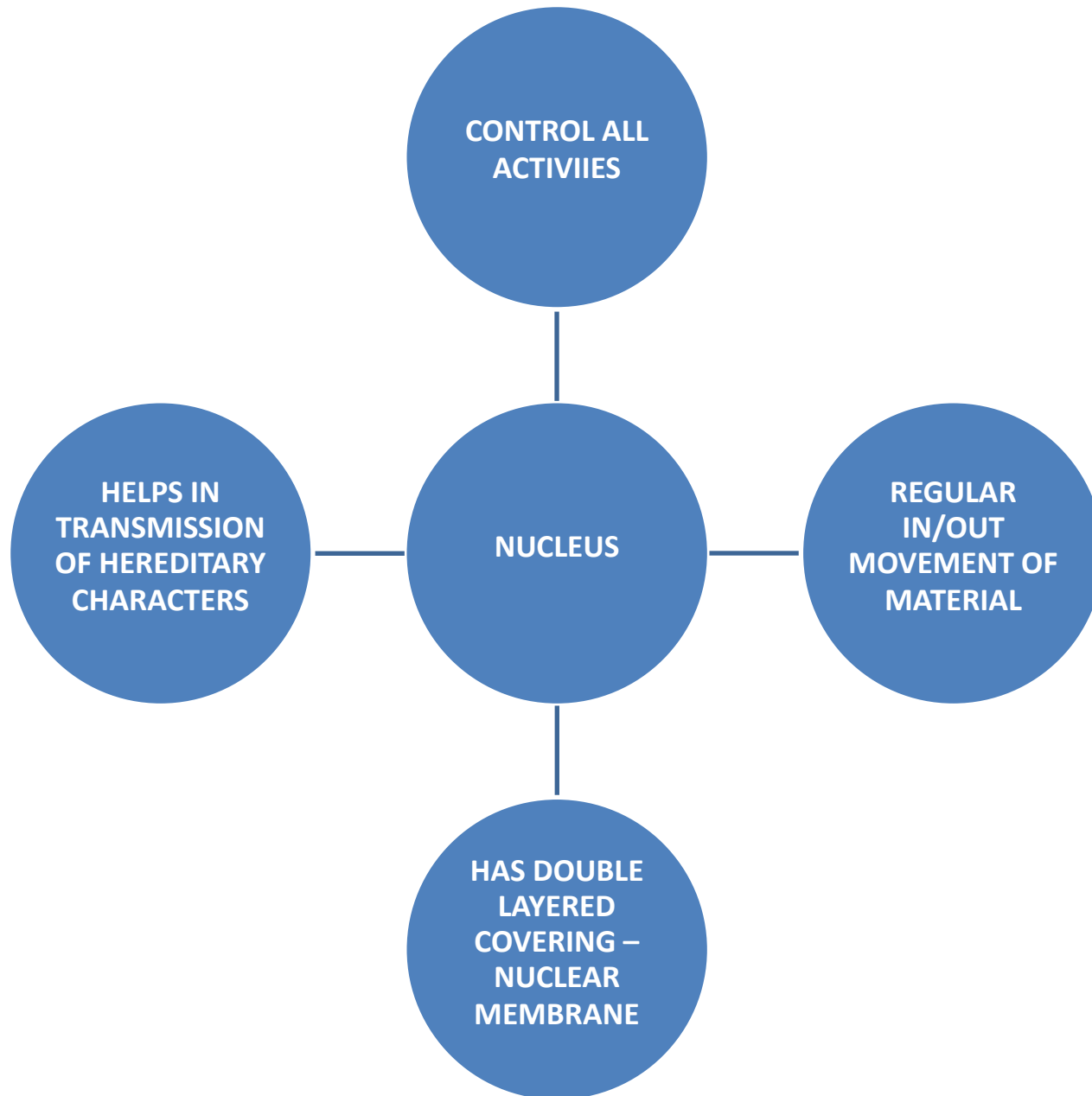
```
graph TD; A[FUNCTION OF CELL WALL] --- B[PROVIDE SHAPE]; A --- C[PROVIDE STRENGTH]; A --- D[ALLOW ENTRY]; A --- E[REPAIR AND REGENERATION];
```

**PROVIDE  
SHAPE**

**PROVIDE  
STRENGTH**

**ALLOW ENTRY**

**REPAIR AND  
REGENERATION**



Cytoplasm

```
graph TD; A[Cytoplasm] --> B[Cytosol]; A --> C[Cell organelles]; B --> D["Aqueous soluble part contains fibrous proteins"]; C --> E["Living part of the cell"]
```

Cytosol

Cell organelles

Aqueous soluble  
part contains  
fibrous proteins

Living part of the  
cell

```
graph TD; A[Endoplasmic Reticulum] --> B[Smooth ER]; A --> C[Rough ER];
```

# Endoplasmic Reticulum

Smooth ER

Rough ER

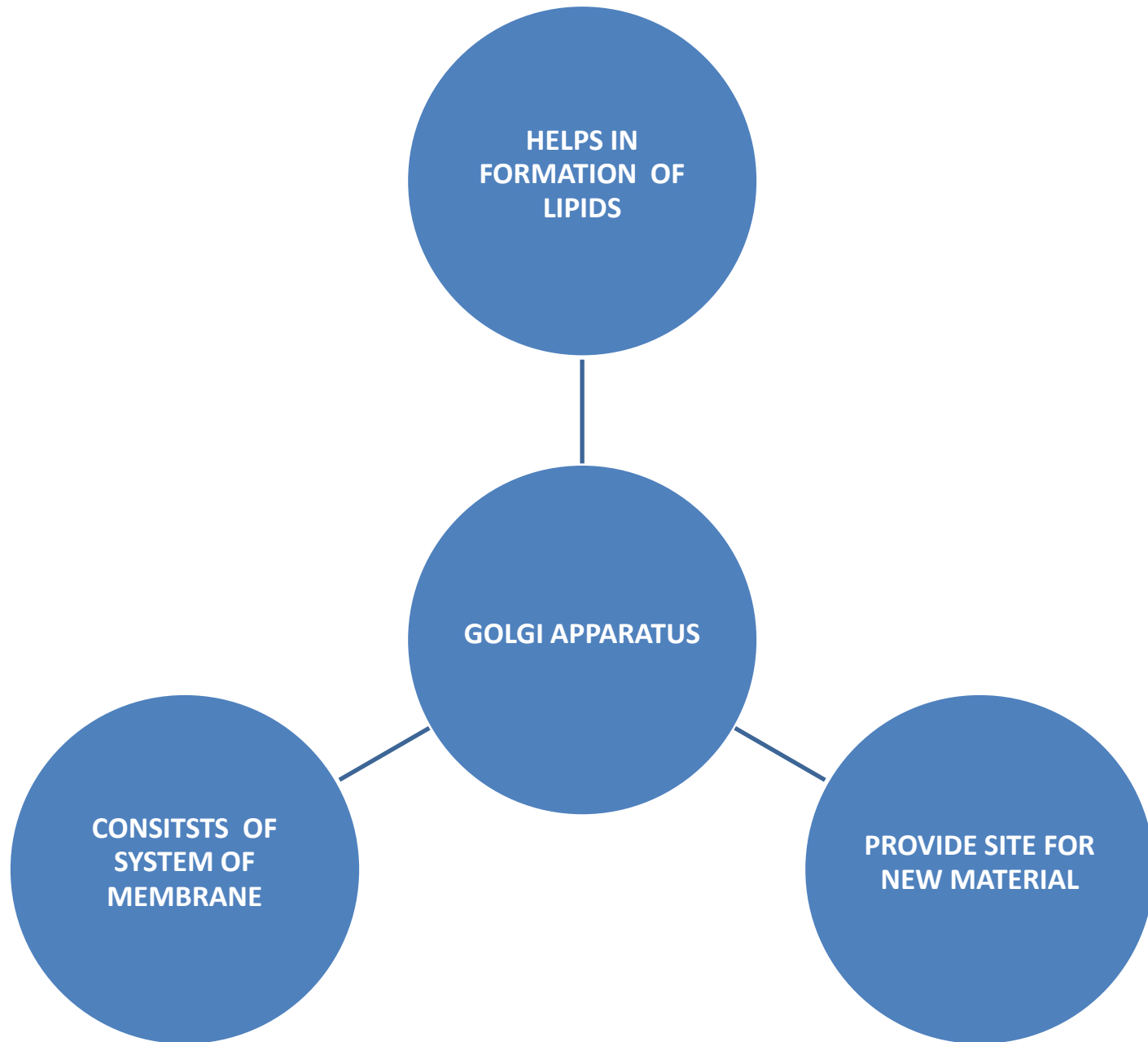
## **FUNCTION OF ENDOPLASMIC RETICULUM**

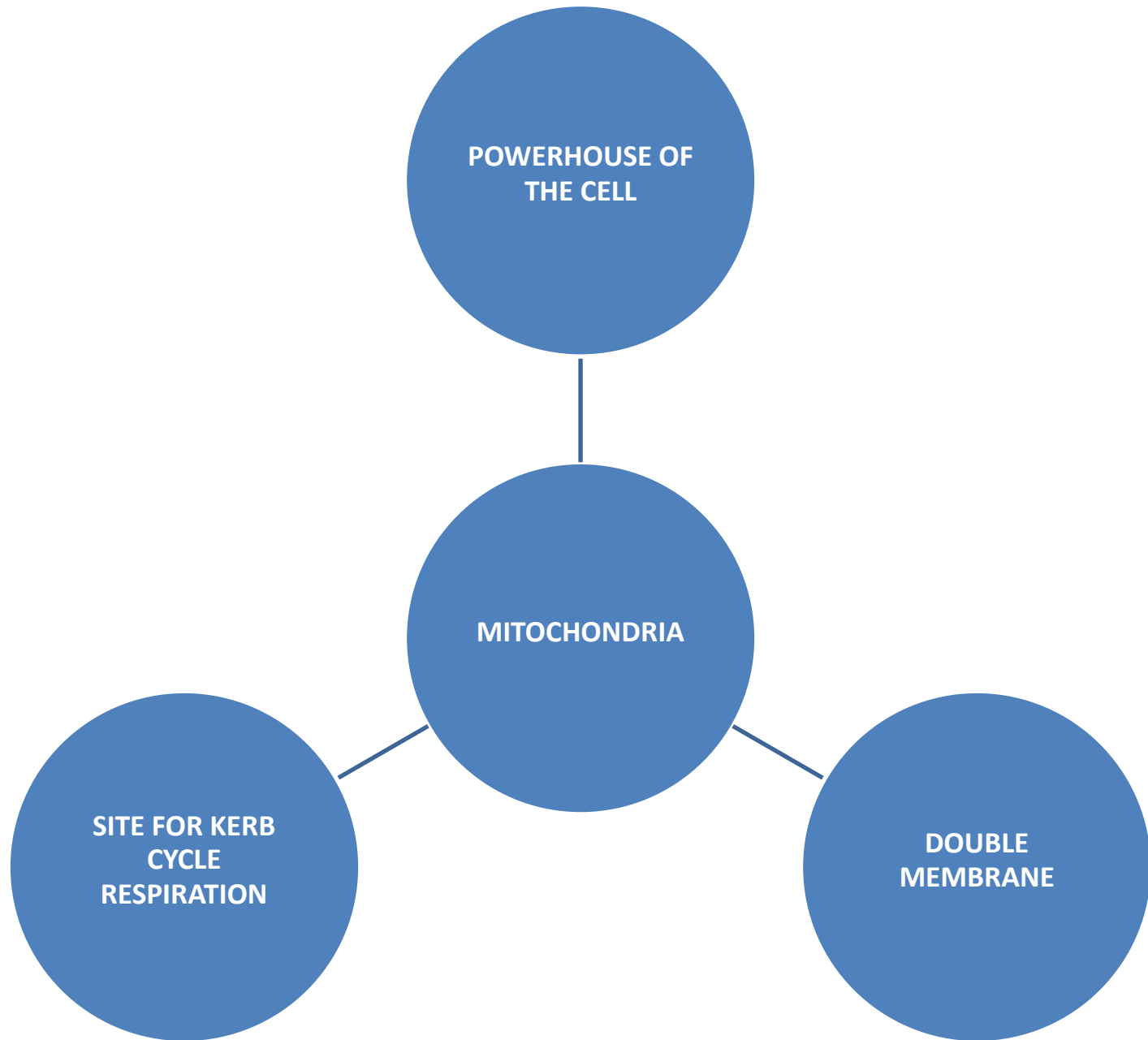
```
graph TD; A[FUNCTION OF ENDOPLASMIC RETICULUM] --- B[NETWORK OF MEMBRANE PRESENT IN THE CYTOPLASM]; A --- C[HELPS IN SYNTHESIS OF FATS CHOLESTEROL]; A --- D[SERVE AS CHANNEL FOR THE TRANSPORT OF MATERIALS]
```

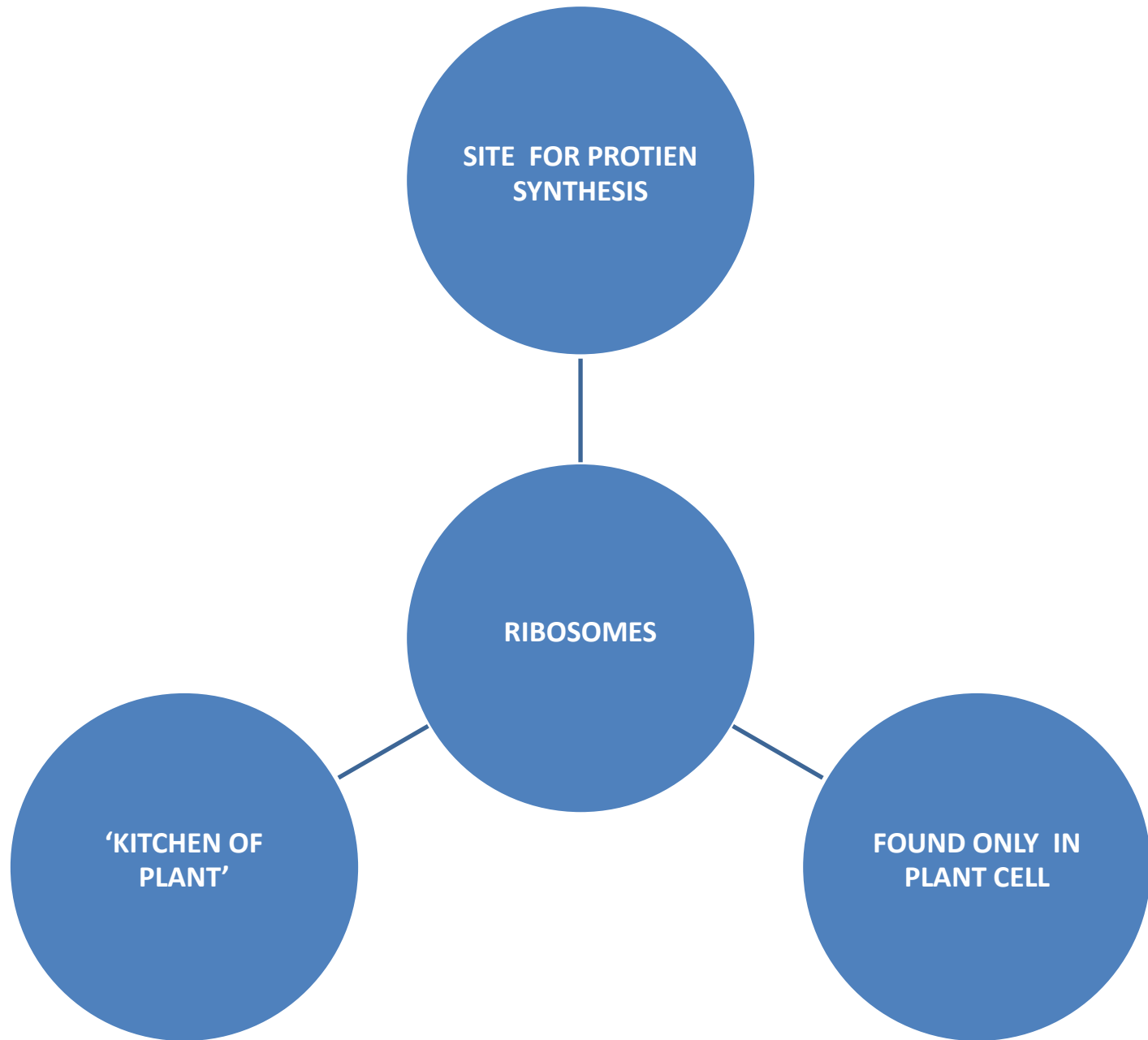
**NETWORK OF  
MEMBRANE PRESENT  
IN THE CYTOPLASM**

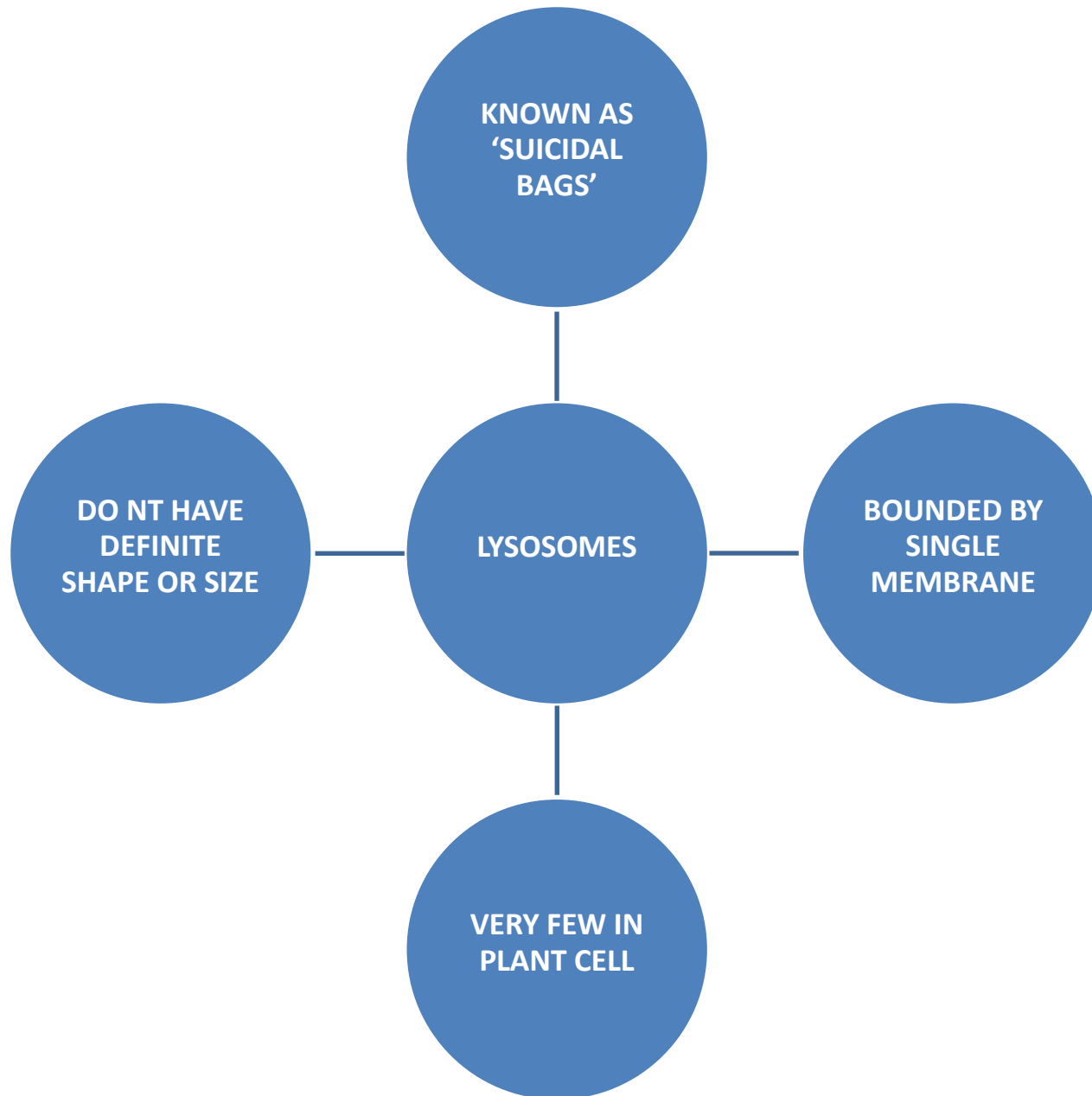
**HELPS IN SYNTHESIS  
OF FATS CHOLESTEROL**

**SERVE AS CHANNEL  
FOR THE TRANSPORT  
OF MATERIALS**









# PLANT CELL

- CONTAINS CHLOROPLASTS
- CELL WALL
- LIMITED MOVEMENT
- LARGE VACUOLE

# ANIMAL CELL

- NO CHLOROPLASTS
- NO CELL WALL
- MOVEMENT
- SMALL VACUOLE

