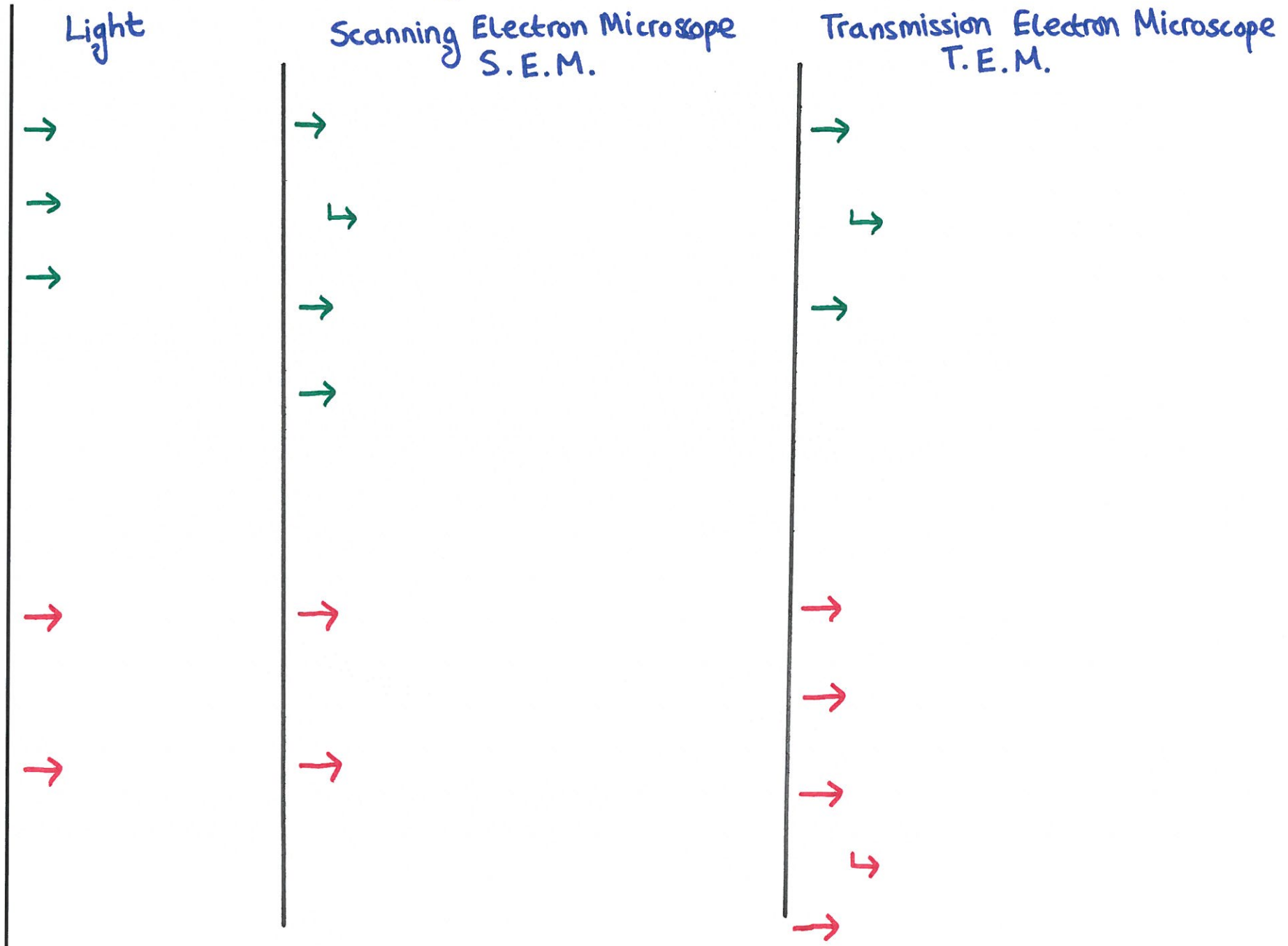




# Comparing Microscopes

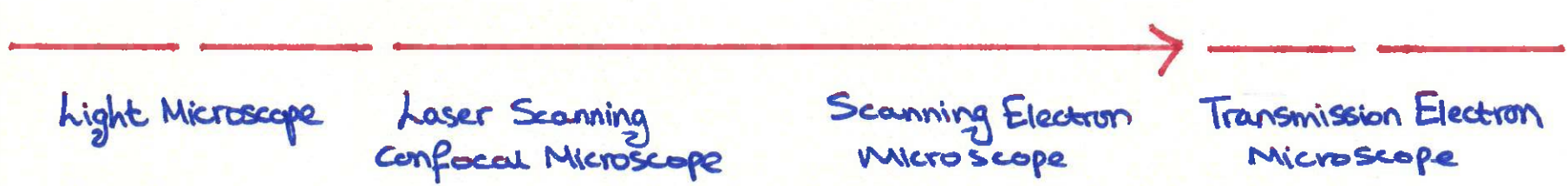
- 1
- 2
- 3
- 4
- 5





# Microscopes

1 2 3 4 5



## Laser Scanning Confocal Microscope

- 
- 
- 
- 
- 

### Advantages

- 
- 

### Disadvantages

- 
-



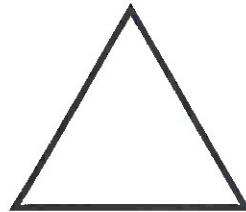
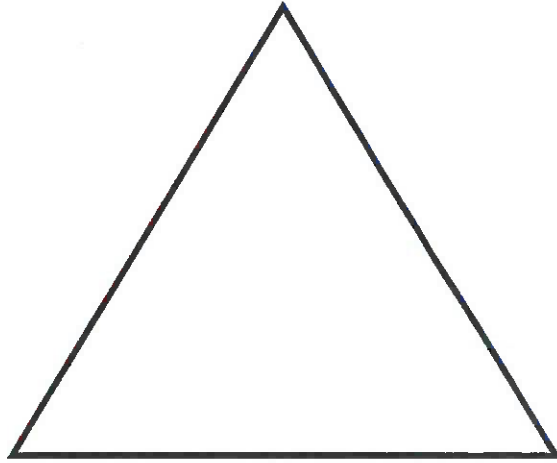
# Order of Magnitude Calculations

- 1
- 2
- 3
- 4
- 5

Magnification



Resolution





TT

Chitin

# Eukaryotic Cells

1 2 3 4 5

Plants

Animal

Algae: →

→

Fungi: →

→



# Eukaryotic Cell Organelles 1

1 2 3 4 5

Lysosomal  
Enzymes /  
Lysozymes

Nucleus

Rough Endoplasmic Reticulum ( )

Smooth Endoplasmic Reticulum ( )



Golgi Aparatus

Golgi Vesicle

lysosomes





# Eukaryotic Cell Organelles 2

Mitochondria

Cell Wall

Vacuole



Chloroplast

Ribosome





TT

Microtubule

# Eukaryotic Cell Organelles 3

1 2 3 4 5

\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_





# Production & Secretion of Proteins

- 1
- 2
- 3
- 4
- 5

Transcription

1



2

3

Translation

4

5

Exocytosis

6

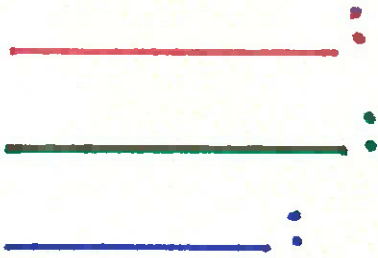
7





# Cytoskeleton

Cytoskeleton



Microfilaments

Function



e.g. →



Microtubules

Microfilaments



Microtubules





# Prokaryotic Cell Structure

1 2 3 4 5

Loop of DNA



Plasmids



Cytoplasm



Flagella



Small Ribosomes



Cell membrane



Capsule



Cell Wall





# Prokaryotes Vs Eukaryotes

- 1
- 2
- 3
- 4
- 5

|   | Prokaryotes | Eukaryotes |
|---|-------------|------------|
| → |             | →          |
| ① |             | ①          |
| ② |             | ②          |
| ③ |             | ③          |
| ④ |             | ④          |
| ⑤ |             | ⑤          |
| ⑥ |             | ⑥          |