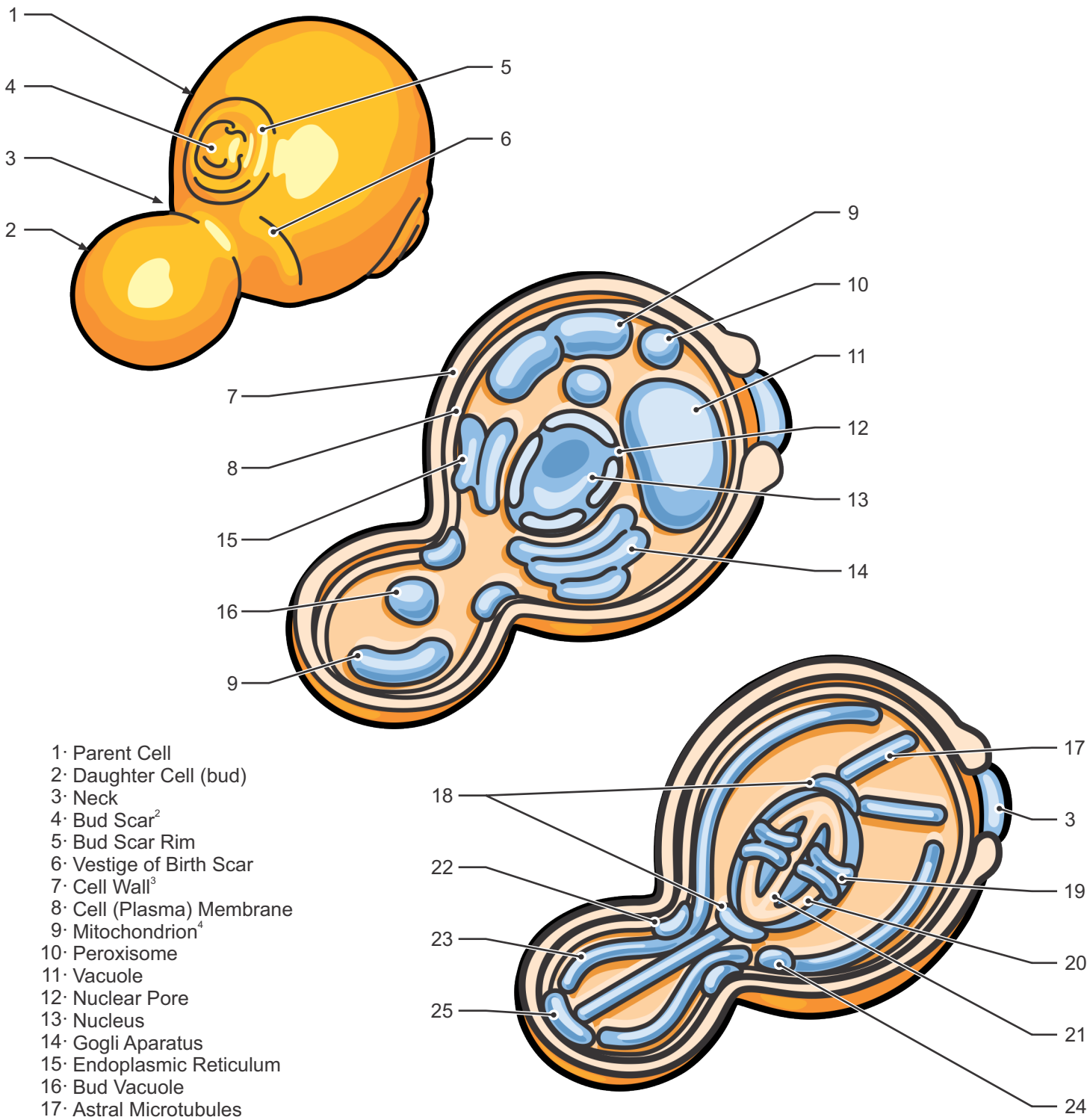
Yeast Cell Anatomy[1]

(*Saccharomyces cerevisiae*)



1· Parent Cell
2· Daughter Cell (bud)
3· Neck
4· Bud Scar[2]
5· Bud Scar Rim
6· Vestige of Birth Scar
7· Cell Wall[3]
8· Cell (Plasma) Membrane
9· Mitochondrion[4]
10· Peroxisome
11· Vacuole
12· Nuclear Pore
13· Nucleus
14· Gogli Aparatus
15· Endoplasmic Reticulum
16· Bud Vacuole
17· Astral Microtubules
18· Spindle Pole Bodies
19· Chromosomes
20· Kinetichore Microtubules
21· Interpolar Microtubules
22· Actin-Myosin Ring[5]
23· Actin Filaments (cables)
24· Neck attachment site (patch)[6]
25· Cortical Attachment Site (patch)[6]

Notes:

[1] Cell shown In mid anaphase of the asexual budding process (mitosis), sometimes referred to as the “shmoo” phase.
[2] Rigid structure composed primarily of Chitin
[3] Composed of polysaccharides, proteins, lipids and chitin.
[4] Poleward movement and fusion of mitochondria occurs during the budding process.
[5] A contractile actin-myosin (actomyosin) ring is joined by a fixed septin ring (which later grows into a collar) at this stage.
[6] Formin patches at neck and tip of budding cell are involved in creation of actin filaments.