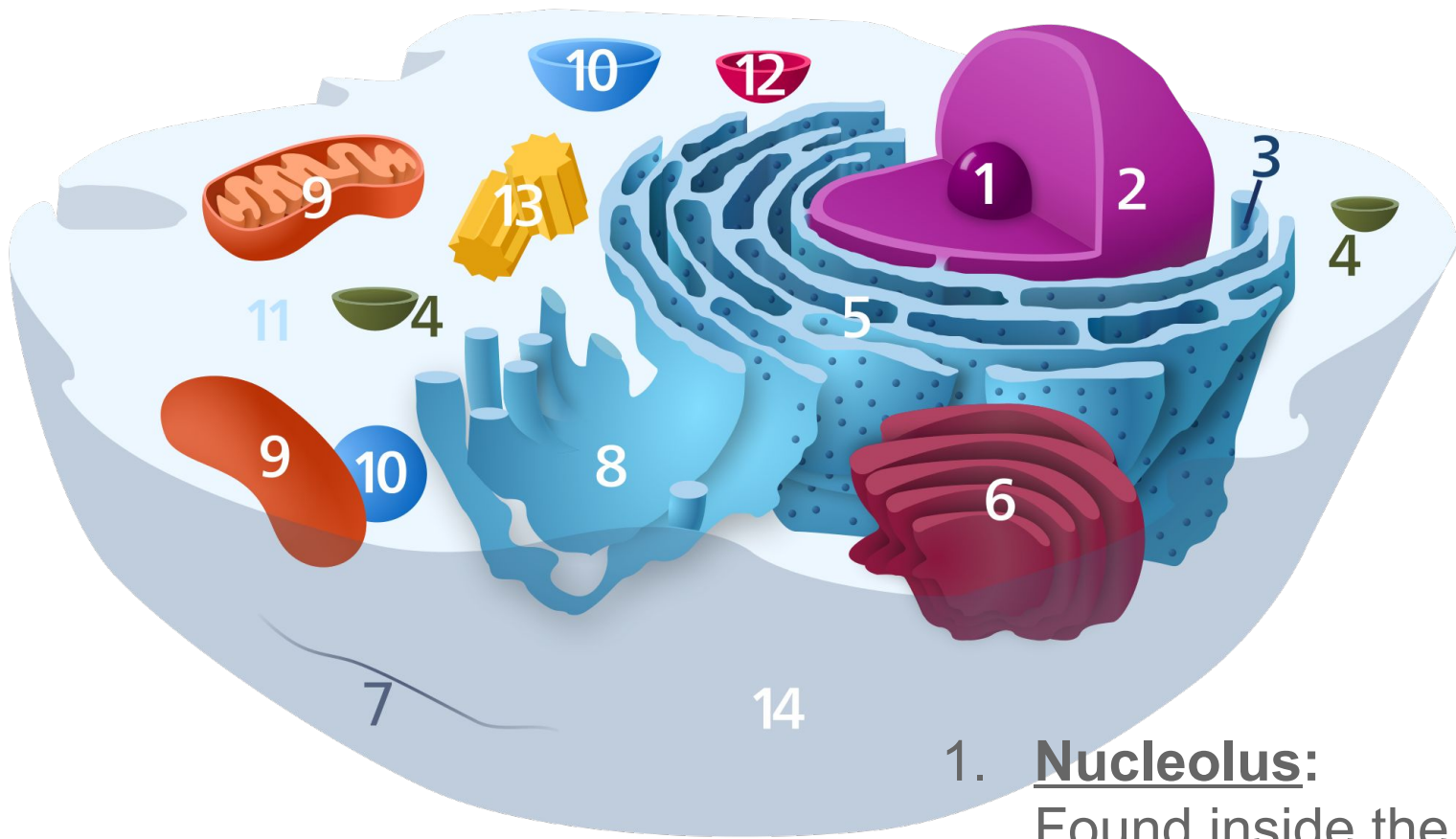


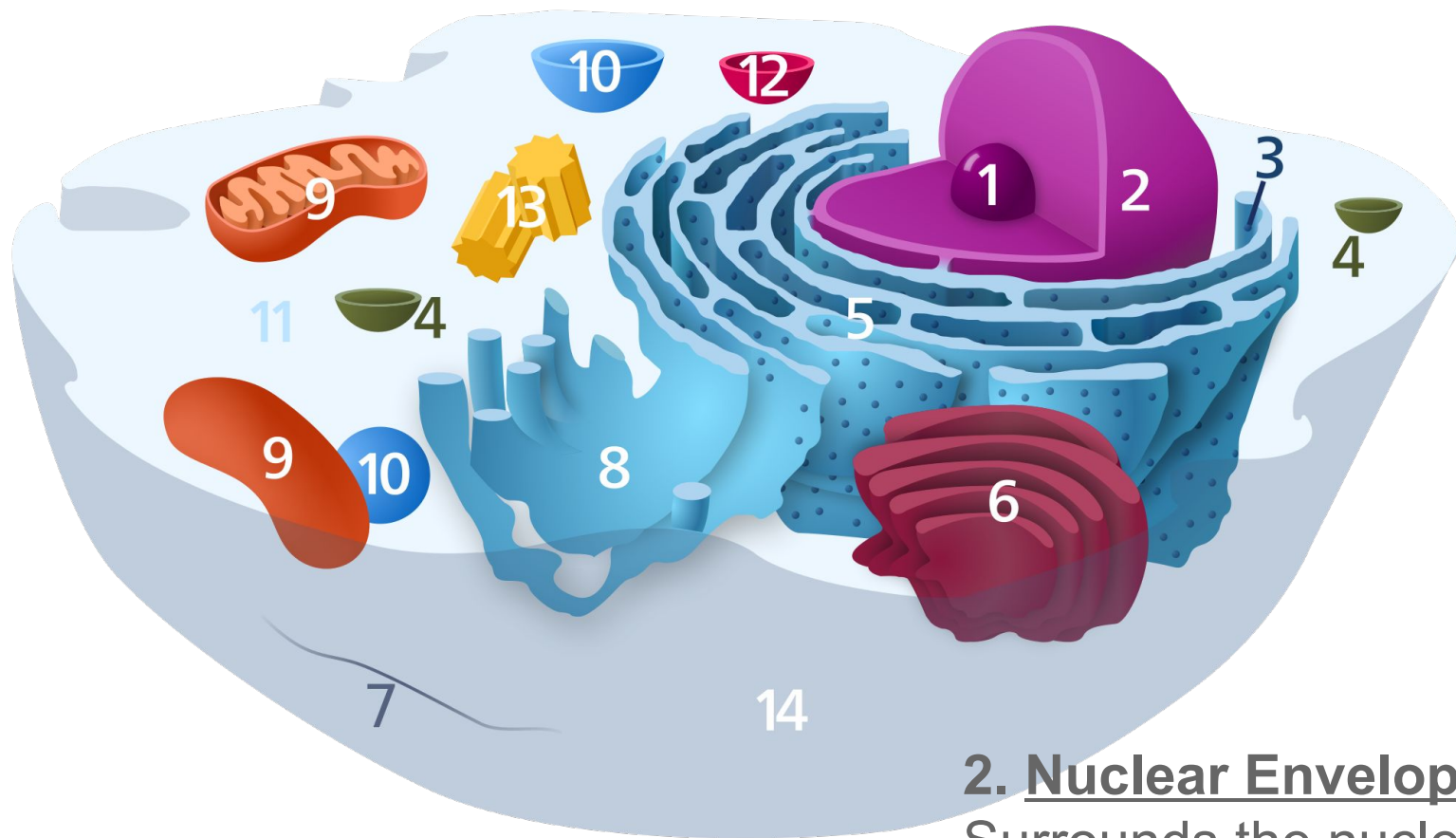
# Eukaryotic Cell Structure

Chapter 7.2



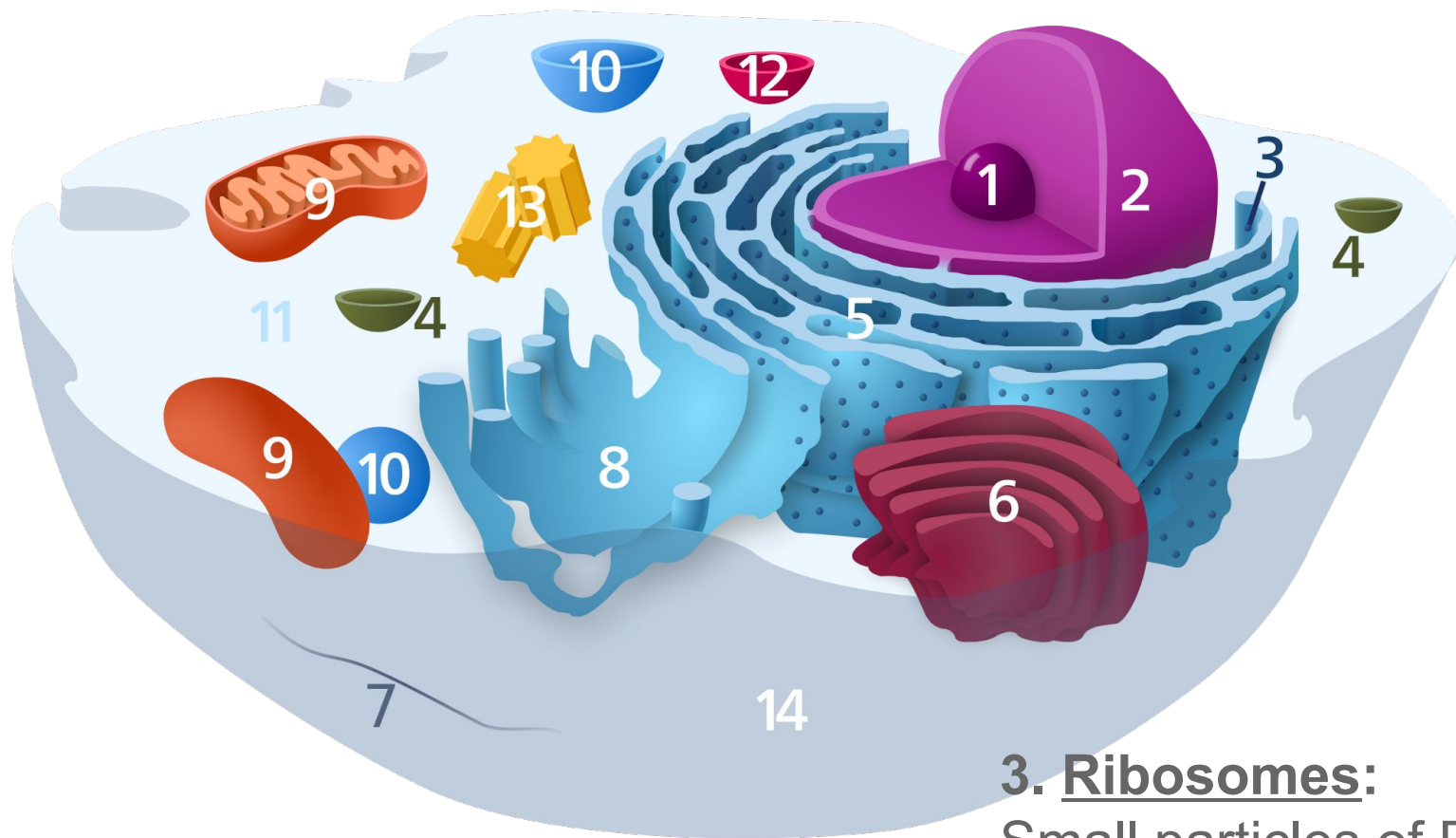


1. **Nucleolus:**  
Found inside the nucleus and produces ribosomes for protein synthesis.



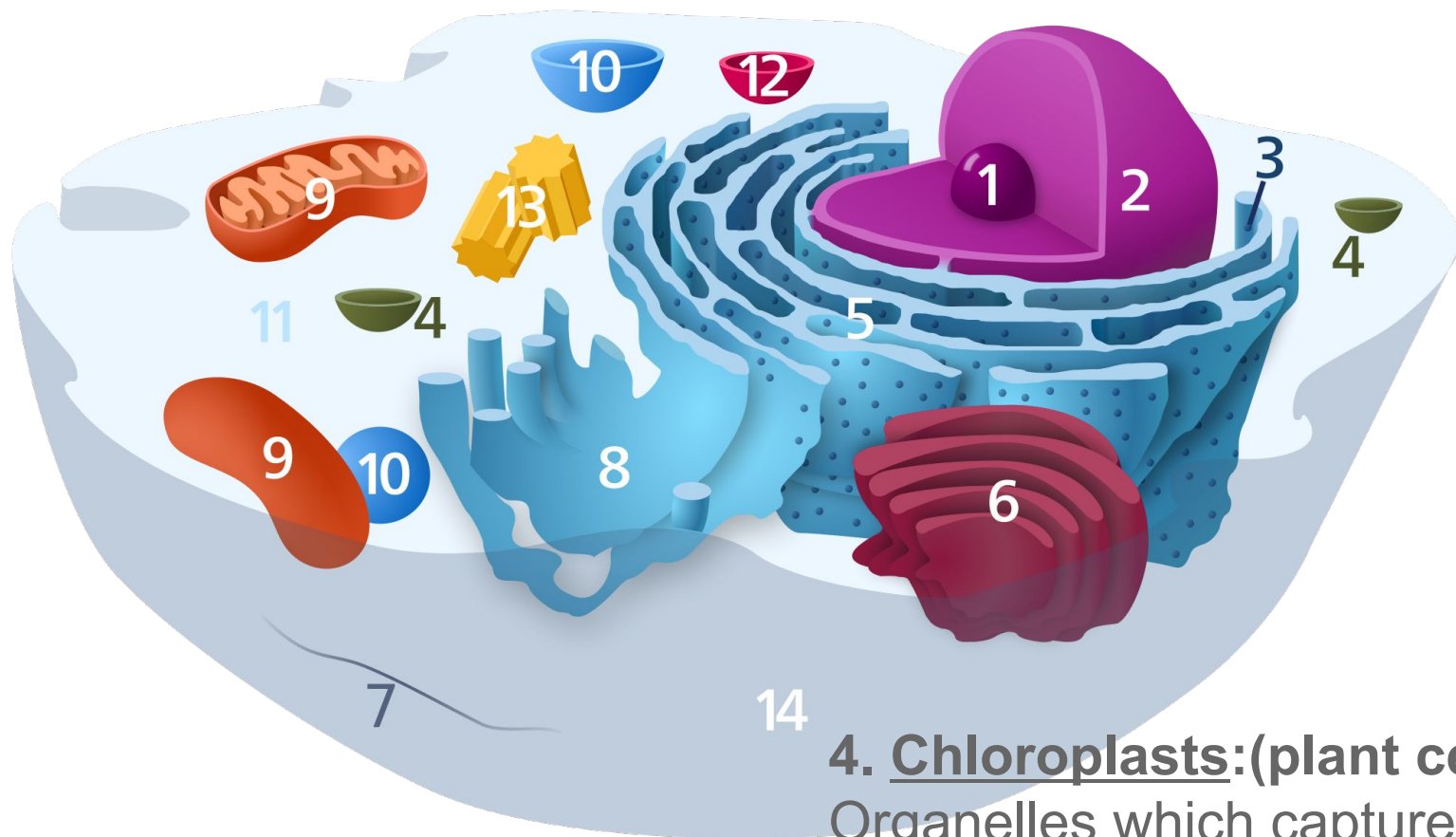
## 2. Nuclear Envelope:

Surrounds the nucleus, covered in nuclear pores for material to pass through.

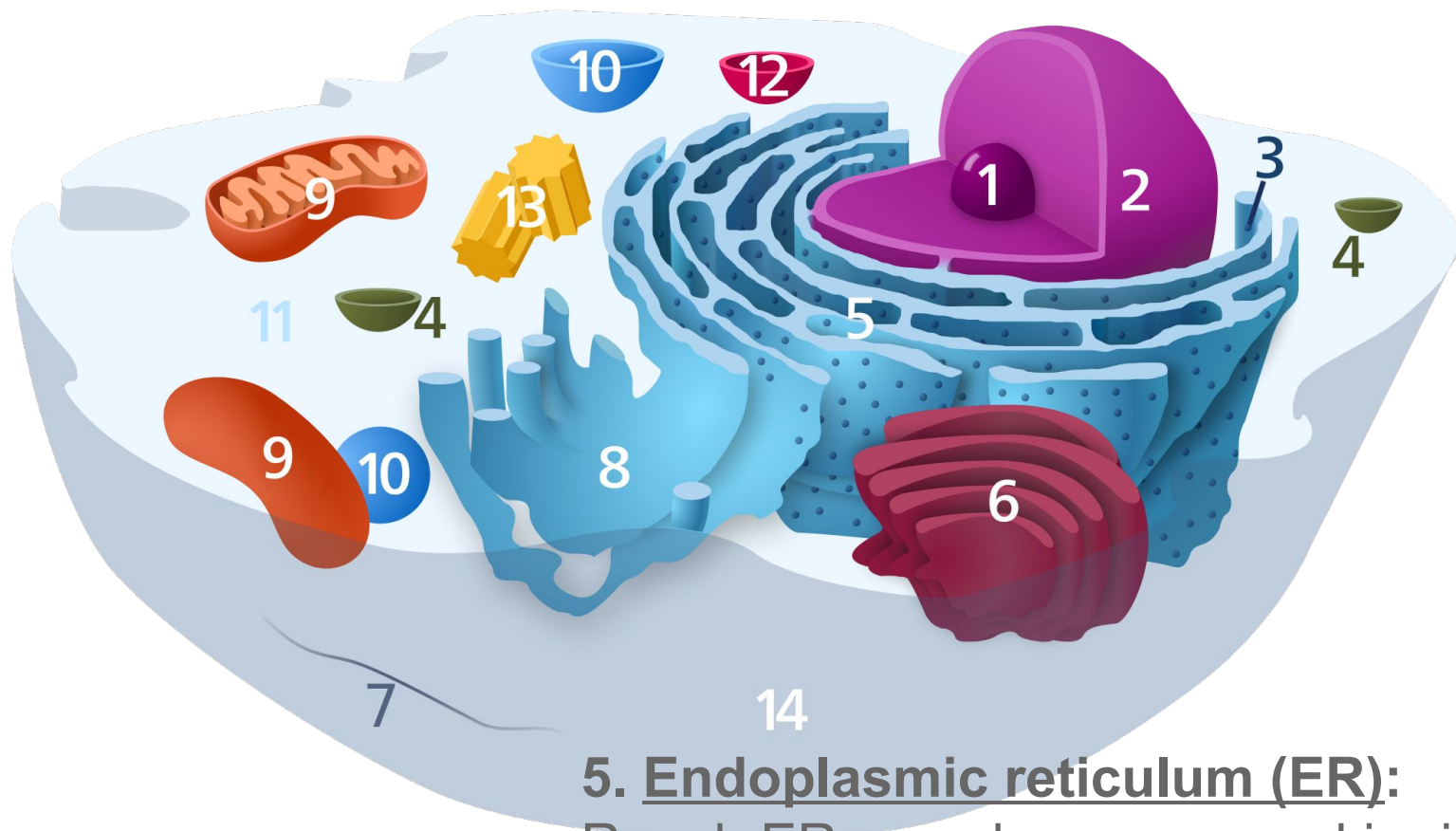


### 3. Ribosomes:

Small particles of RNA where proteins are assembled.

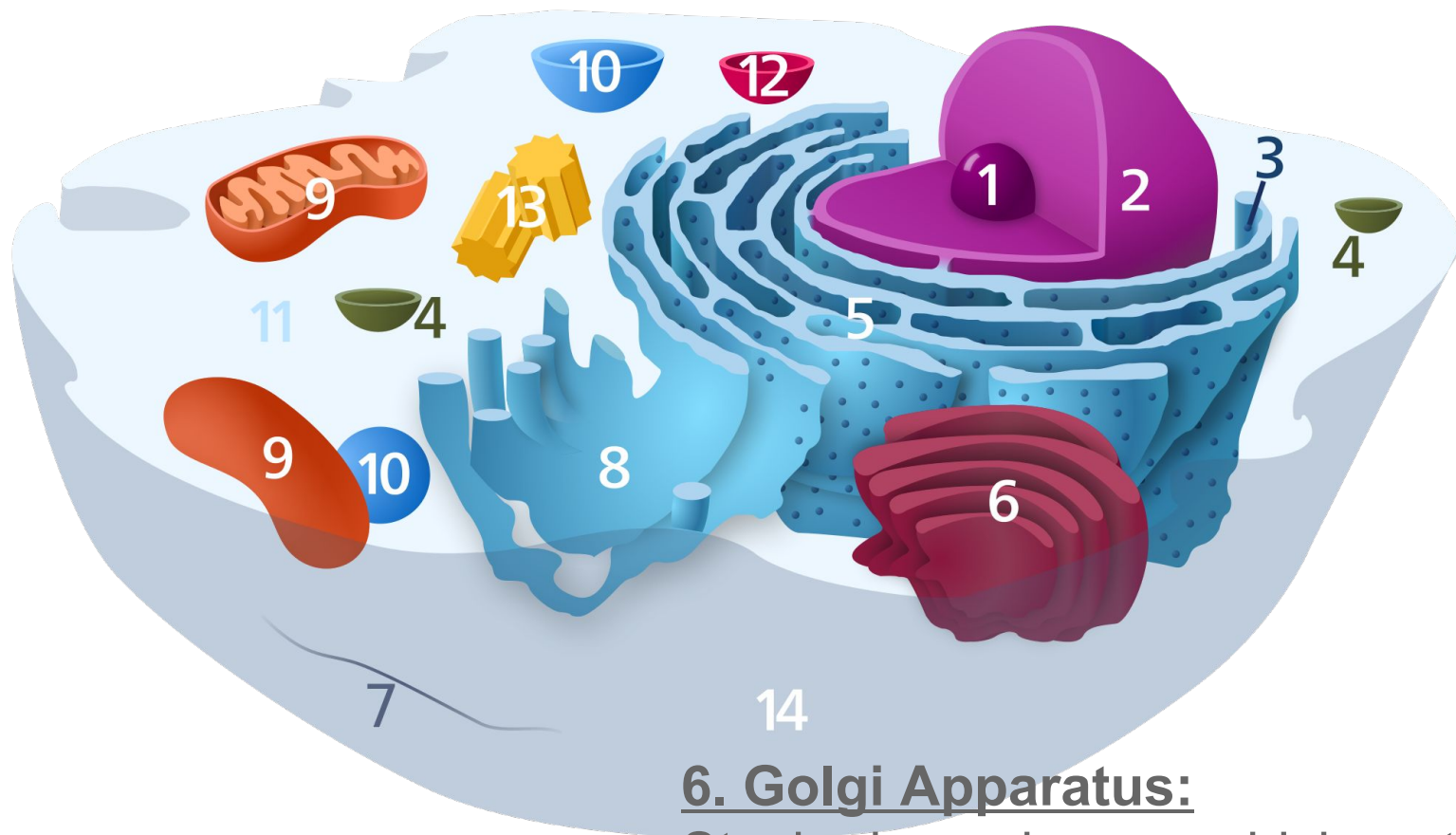


4. **Chloroplasts**:(plant cells only)  
Organelles which capture sunlight and convert it into chemical energy through photosynthesis.



**5. Endoplasmic reticulum (ER):**

Rough ER, membrane covered in ribosomes, has passageways that carry proteins & other materials to parts of the cell.



**6. Golgi Apparatus:**

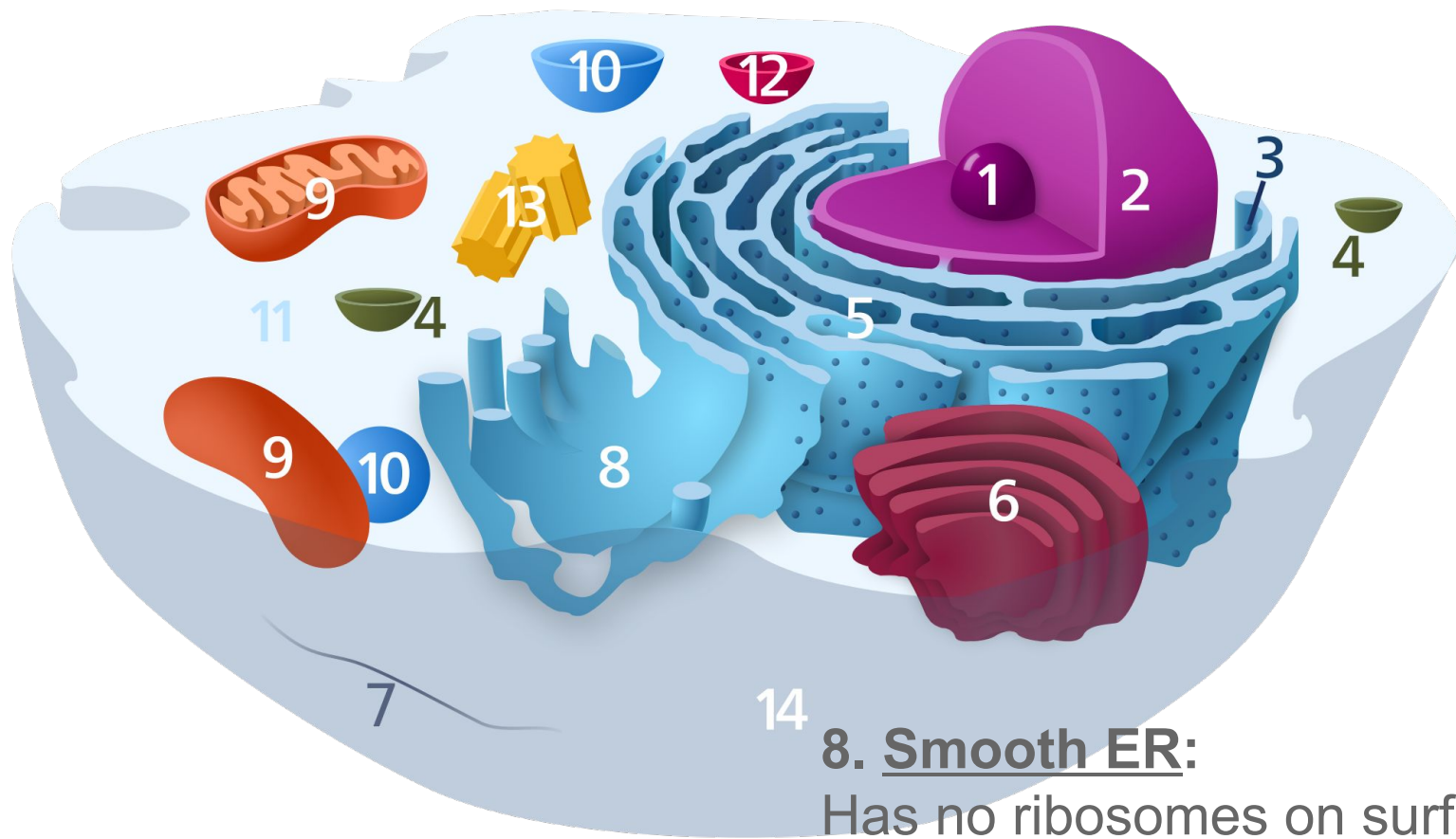
Stacked membranes which sort, package, and distribute proteins from the ER.



### 7. Cytoskeleton:

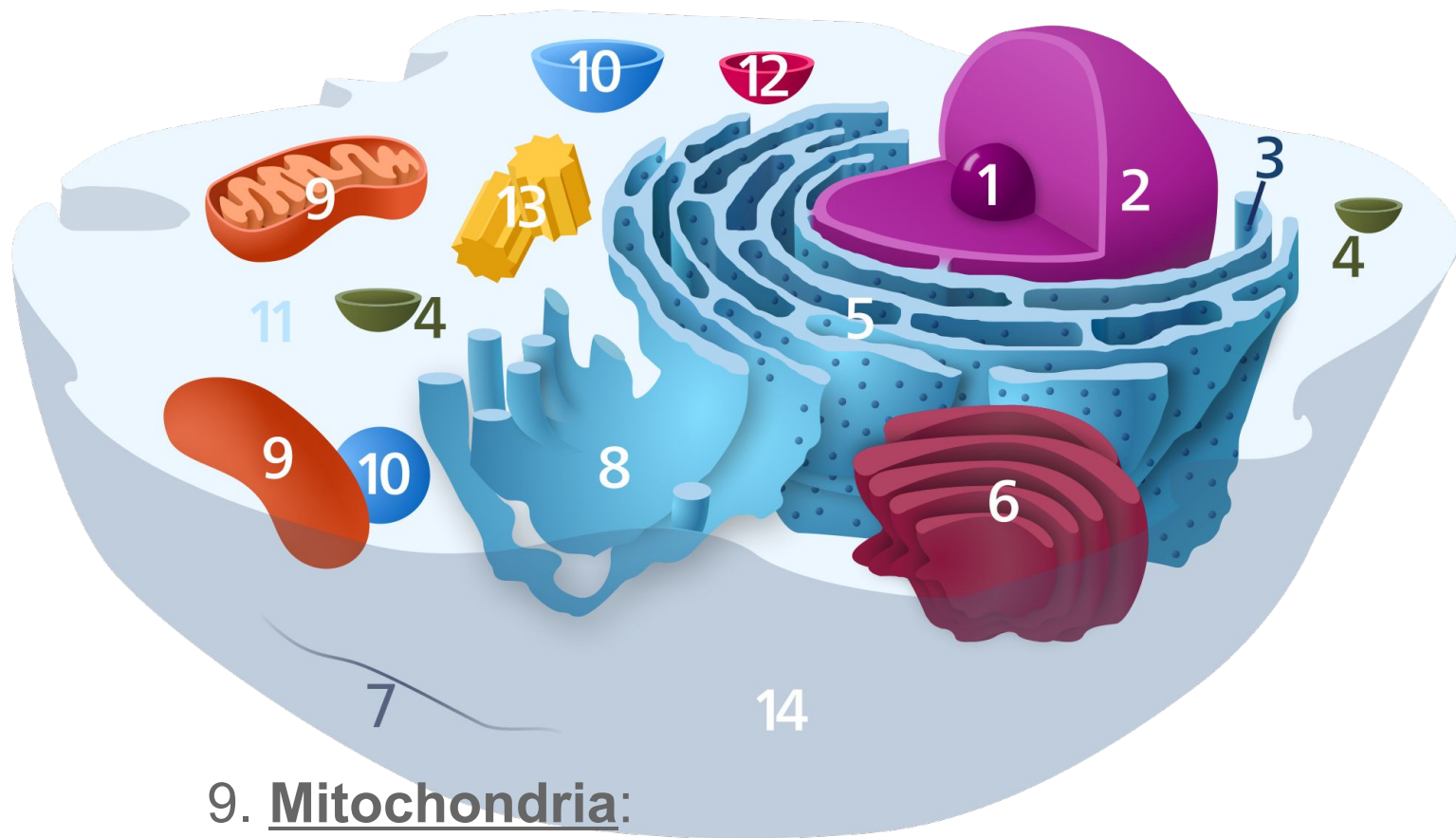
Microtubules and filaments throughout the cell that creates structure and allows for movement.





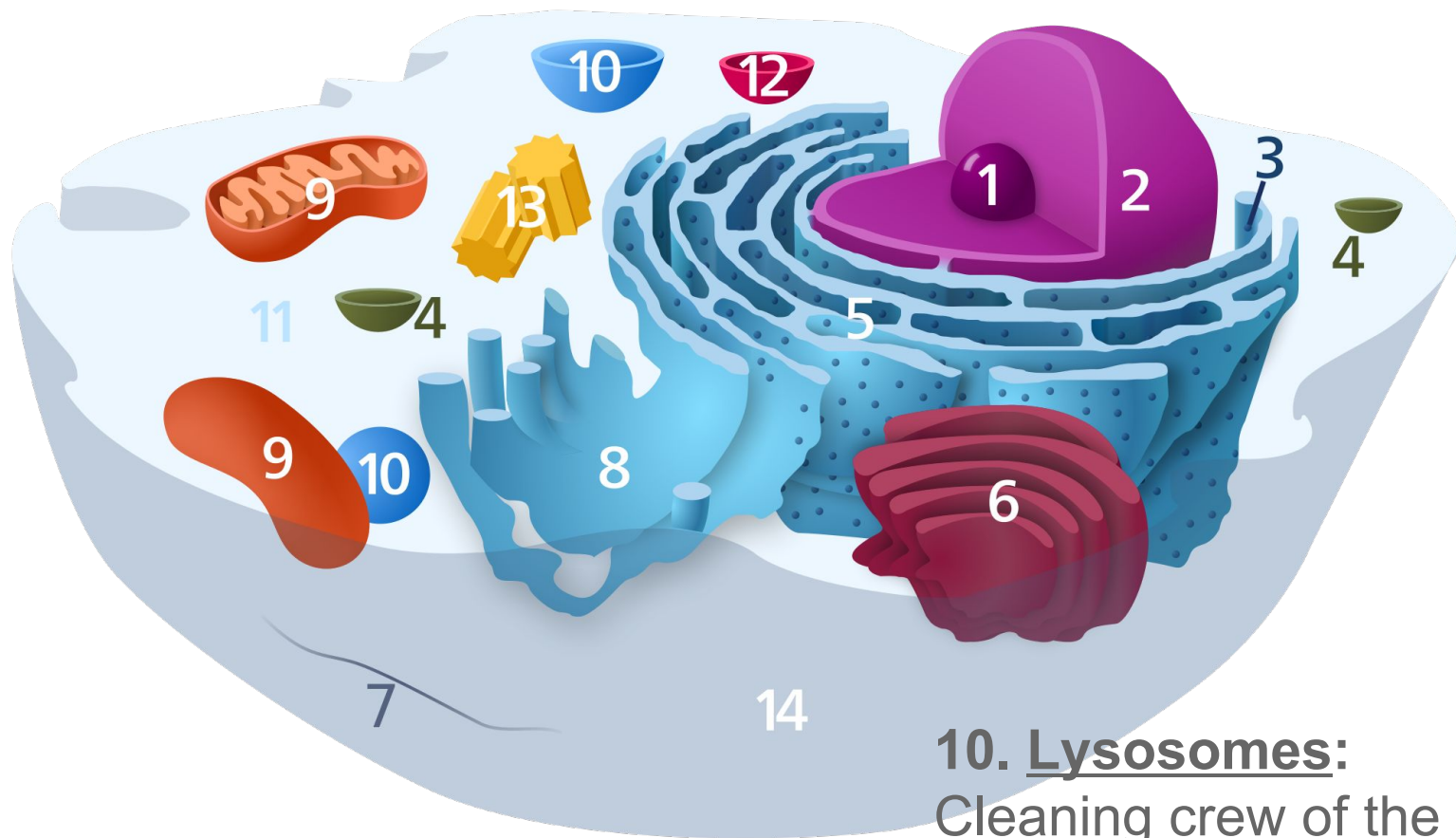
### 8. Smooth ER:

Has no ribosomes on surface, contains collections of enzymes that perform specialized tasks



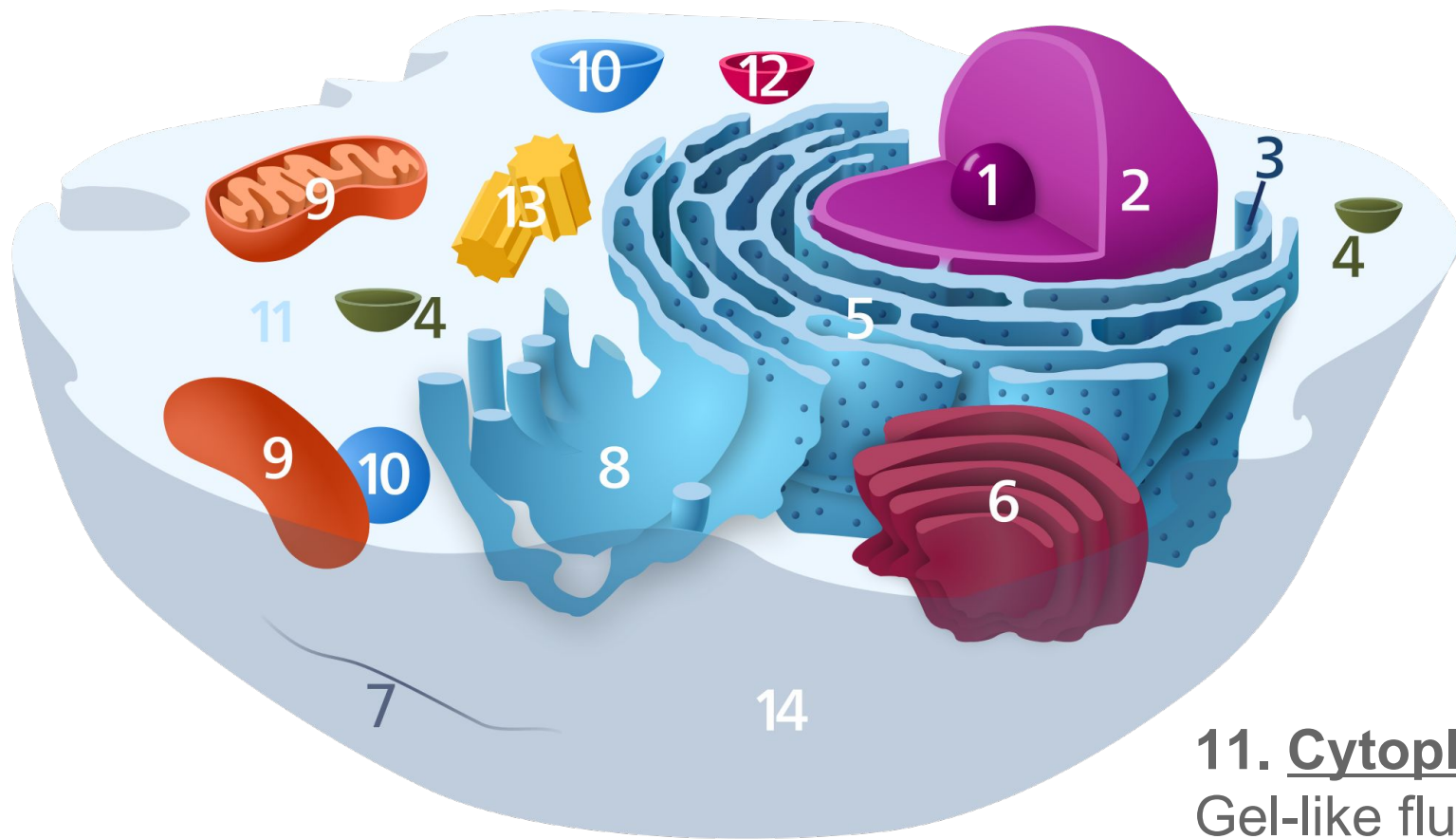
### 9. Mitochondria:

Convert the energy stored in food into energy to perform all necessary functions. “The powerhouse of the cell”

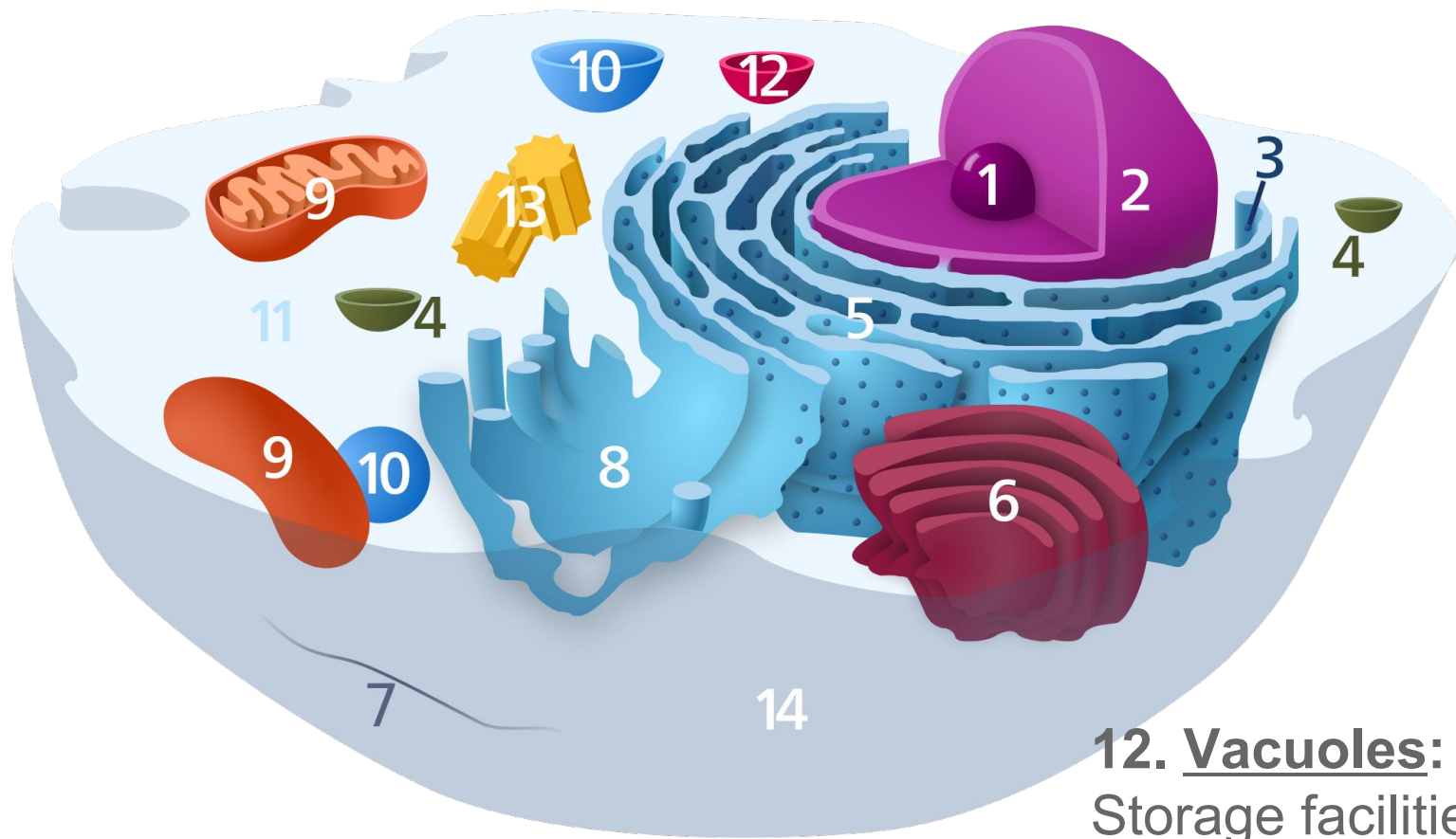


### 10. Lysosomes:

Cleaning crew of the cell, used to breakdown compounds and organelles to be disposed.

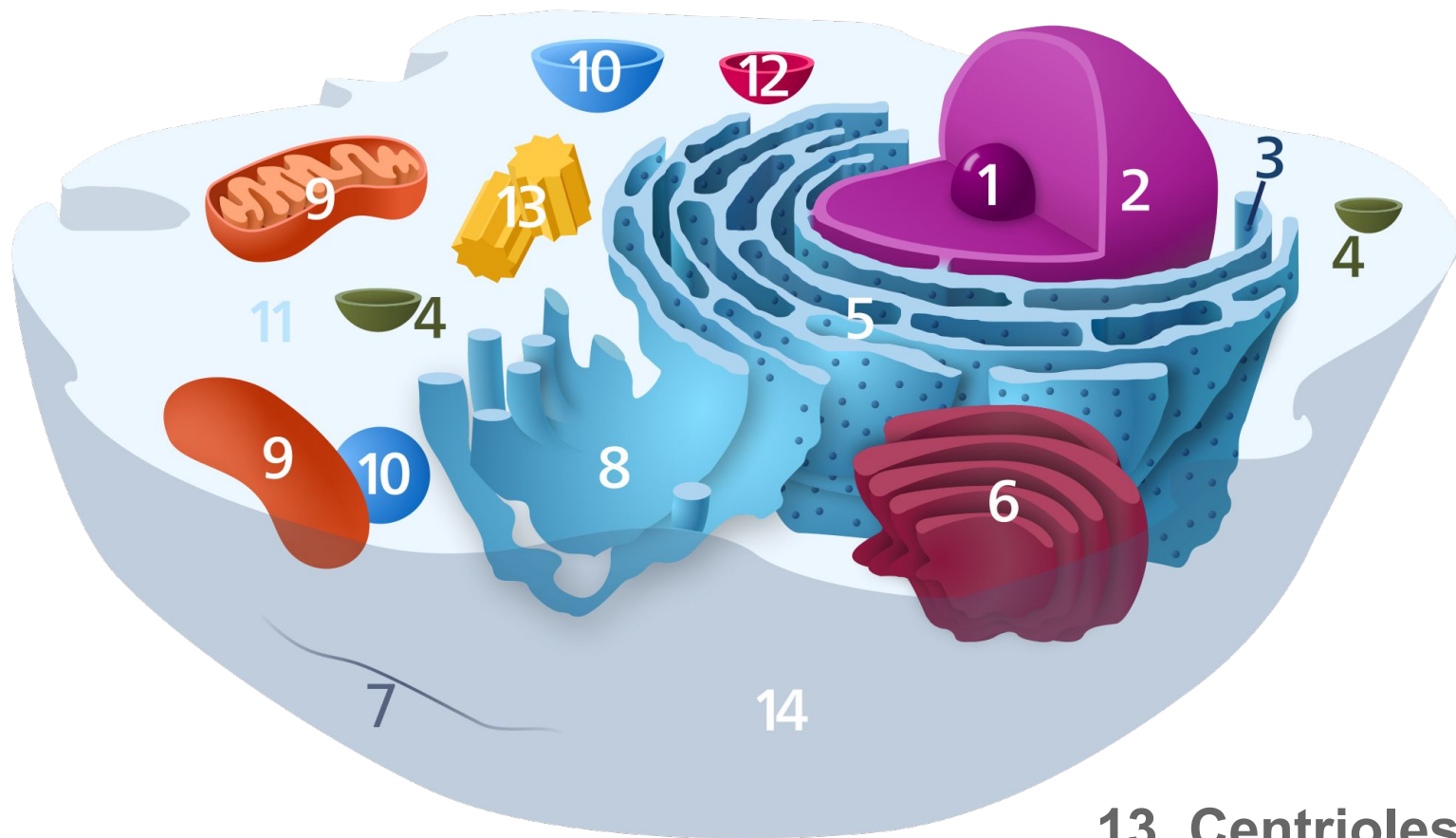


**11. Cytoplasm:**  
Gel-like fluid where organelles are found in the cell.



## 12. Vacuoles:

Storage facilities of the cell for food, water, and other useful materials.



**13. Centrioles:**  
Used in cellular division



**14. Cell Membrane:**

Surrounds and contains the cell. “Gatekeeper” allows nutrients in and wastes out.