1. F, 2. I, 3. G, 4. H, 5. D, 6. B

Characteristics of Typical Bacterial Cell Structures	
Structure	**Function**
Nucleoid	DNA is generally confined to this central region
Ribosomes	Site of translation (protein synthesis)
Inclusions (storage granules)	Storage of reserves of nutrients
Capsule	Layer of polysaccharides (occasionally proteins); attachment to surfaces; protection against phagocytosis
Cell wall • Gram-positive bacteria • Gram-negative bacteria	 Prevents osmotic lysis of cell protoplast and confers rigidity and shape to cells Peptidoglycan prevents osmotic lysis and confers rigidity and shape; outer membrane is permeability barrier; associated **LPS** (endotoxin) and proteins have various functions.
Plasma membrane	Permeability barrier; transport of solutes; energy generation; location of numerous enzyme systems
Chromosome	Genetic material of cell
Plasmid	Extrachromosomal genetic material
Flagella	Motility (swimming movement)
Pili • Sex pilus • Common pili or fimbriae	 Mediates DNA transfer during conjugation Attachment to surfaces; protection against phagocytosis

The **cell envelope** is a descriptive term for the several layers of material that envelope or enclose the protoplasm of the cell. The cell protoplasm **(cytoplasm)** is surrounded by the plasma membrane, a **cell wall** and a **capsule**. The cell wall itself is a layered structure in gram-negative bacteria. All cells have a **plasma membrane,** which is the essential and definitive characteristic of a "cell." Almost all prokaryotes have a cell wall to prevent damage to the underlying protoplast. Outside the cell wall, foremost as a surface structure, may be a polysaccharide **capsule** or **glycocalyx**.