

BIO1140

Quiz 2: Available online as of January 24, due to be completed by 10 pm January 29

1. Which of these lipids is most important for plasma membranes?

- a) Fatty acids
- b) Triglycerides
- c) Isoprenes
- d) Phospholipids

2. Which component of animal cells allows them to group and form into tissues and organs?

- a) Cytoplasm
- b) Extracellular matrix
- c) Plasma membrane
- d) Glycocalyx

3. Which one of these structures allows plant cells to exchange small molecules?

- a) Plasmodesmata
- b) Integrins
- c) Adherens junctions
- d) Tight junctions

4. Which one of the following components is not part of the extracellular matrix?

- a) Microtubules
- b) Collagen
- c) Fibronectin

d) Polysaccharides

5. True or False – The components of a plasma membrane are static once it is formed.

a) True – Only the shape of the membrane can change as the cell moves

b) True – The composition of the membrane helps maintain the cell's shape

c) False – The constitution and location of membrane components change constantly

d) False – Only the location of the membrane components changes occasionally

6. Cytochalasin D is a metabolite that can be extracted from fungus. It interacts with actin microfilaments by preventing the addition of new monomers at the plus ends. What will be the impact for animal epithelial cells if they are treated with Cytochalasin D?

a) Nothing – epithelial cells do not have microfilaments

b) The cell's membrane will not be supported during growth

c) The microfilaments will only extend at the minus end

d) The microtubules will take over for the microfilaments