1. Phospholipids are _____.

   a. hydrophobic molecules with a polar head group and non-polar tails.
   b. amphipathic molecules with a polar head group and hydrophobic tails.
   c. amphipathic molecules with a hydrophobic head group and hydrophilic tails
   d. hydrophilic molecules with a polar head group and non-polar tails.

2. Which of the following BEST describes how a bacterium would respond as temperature is lowered?

   It would…..

   a. reduce the fluidity of the membrane by removing cholesterol from the membrane.
   b. reduce the fluidity of the membrane by removing phospholipid translocator proteins.
   c. maintain the fluidity of the membrane by producing phospholipids with shorter tails and introducing cis-double bonds in these tails.
   d. It increase the fluidity of the membrane by removing cis-double bonds from phospholipid tails and shortening these tails.

3. Which of the following is an exoplasmic face?

   a. The leaflet of the inner mitochondrial membrane that faces the matrix.
   b. The leaflet of a vesicle membrane that faces the lumen.