

1. Which of the following styles of arrows is used to indicate species that are in equilibrium?

- A Choice A (see e-mailed quiz).
- B Choice B
- C Choice C
- D Choice D

2. Which of the following chemical species is the strongest acid?

- A Choice A (see e-mailed quiz).
- B Choice B
- C Choice C

3. Which of the following diagrams depicts a spontaneous reaction?

- A Choice A
- B Choice B

4. The quantity indicated by the red arrow is the entropy of the reaction.

- A True
- B False

5. A phosphate species is shown. Which carbon-based functional groups are analogous to the functional groups in this species? Mark all that apply.

- A amide
- B anhydride
- C ester
- D alcohol
- E carboxylic acid