1. What substrate of photosynthesis is most commonly and easily measured?
a. Oxygen
b. Carbon dioxide
c. NADP
d. NADPH

2. Which of following is not essential to report or control when measuring photosynthesis?
a. Light
b. Humidity
c. Osmotic potential
d. Leaf temperature
e. Carbon dioxide concentration

3. If you increase the flow rate of air passing over the leaf a small amount what will happen to CO_2, dew point and the photosynthetic rate?
a. [CO_2] will go up, dew point will go down, and photosynthesis will increase
b. [CO_2] will go down, dew point will go up, and photosynthesis will remain the same
c. [CO_2] will remain the same, dew point will go down, and photosynthesis will decrease
d. [CO_2] will decrease, dew point will decrease, and photosynthesis will remain the same

4. Approximately many moles of CO_2 are taken up if you measured 18 µmol of O_2 per $m^{-2}s^{-1}$ given off during photosynthesis?
a. 18 µmol $m^{-2}s^{-1}$
b. 9 µmol $m^{-2}s^{-1}$
c. 36 µmol $m^{-2}s^{-1}$
d. 12 µmol $m^{-2}s^{-1}$

5. Why is C4 photosynthesis called C4?
a. There are 4 carboxylations for every 1 carboxylation in "normal" photosynthesis
b. The sugar directly produced by the CO_2 uptake has 4 carbon atoms
c. 4 CO_2 molecules are taken up at once by PEP carboxylase
d. C4 photosynthesis evolved after B4 photosynthesis

6. Why is it beneficial to increase the [CO_2] around rubisco?
a. Rubisco will use less H_2O
b. To prevent to CO_2 from leaking out
c. To minimize the oxygenation reaction of rubisco
d. To increase the photorespiration rate

7. In a C4 plant where is the calvin cycle?
a. In all cells
b. Only in the root
c. In the bundle sheath cells
d. In the mesophyll cells