SNC1D Water, Carbon, Nitrogen, and Phosphorous Cycles

Read the following questions and then watch these YouTube videos (the addresses will also be tweeted out) to find the answers:

- The Hydrologic and Carbon Cycles: Always Recycle! Crash Course Ecology #8 https://youtu.be/2D7hZpIYlCA
- Nitrogen and Phosphorus Cycles: Always Recycle! Part 2 Crash Course Ecology #9 - https://youtu.be/leHy-Y_8nRs

(Hank talks fairly quickly; I suggest either turning on the Closed Captioning or following the transcript.) Once you have watched them and taken notes, take the webquiz at https://goo.gl/forms/XDuSDZpOolmy5g3S2

The Hydrologic Cycle

- 1. What is the hydrologic cycle?
- 2. What is precipitation? State some examples.
- 3. Complete the states of matter triangle

- 4. What is a cloud?
- 5. Where does most evaporation take place? _____
- 6. Why are wind & clouds important to the water cycle?

- 7. What is runoff?
- 8. What happens to water that falls to the ground? (4 things)
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- 9. How do living organisms contribute to the water cycle? (5 things)
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The Carbon Cycle

2.

- 1. Why is carbon important? (3 things)
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 - How do plants contribute to the carbon cycle? (3 things)
 - now do plants contribute to the carbon cycle. (5 thing
 - •
 - •
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- 3. State 3 things that can happen to the carbon taken in by plants.
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- 4. Why are oceans important to the carbon cycle?

5. What are humans doing to change the stability of the carbon cycle?

6. What happens as the Earth gets warmer?

The Nitrogen cycle

- 1. How much of the atmosphere is made of nitrogen?
- 2. Why is it so hard too use the nitrogen in the atmosphere?
- 3. What is nitrogen fixation?
- 4. How do decomposers help the nitrogen cycle?
- 5. What else can break N2 apart?
- 6. Describe the nitrogen cycle.

The Phosphorous Cycle

- 1. Where is phosphorus found? _____
- 2. What are lithotrophs?
- 3. Describe the phosphorous cycle... ... on land.
- ... in the ocean.

4. How do humans affect the nitrogen & phosphorus cycles?