Name_____ Date_____ Period_____ www. p o r c h e d d u. w e e b l y.com

Go to the following website to answer the questions below (there is a link from Ms. P 's website):
http://prof.danglais.pagesperso-orange.fr/animations/environment/natural_cycles/carbon_cycle_version2.html

1. Name all the places where carbon exists:
   a. e.
   b. f.
   c. g.
   d.
2. List all the roles that plants and trees perform in the carbon cycle on land:
   a.
   b.
   c.
3. After leaves decompose, what may happen to the carbon in them?

4. What is the process called where gases move between the ocean's surface and the atmosphere?

5. How does carbon get from the atmosphere into fish and then into the ocean sediment?

6. How does carbon from the ocean water get into shells that settle on the ocean floor?

7. Can carbon get from the deep ocean back into the atmosphere? If yes, explain how.

8. What are two major ways that humans affect the carbon cycle?
   a.
   b.
9. How can these actions contribute to global warming?

10. Take the quiz. Your quiz score = _____%

Science 10 **Carbon Cycle Worksheet** Name:_____ Blk:____

Go to the following website to answer the questions below (there is a link from Mr. A.'s website):
http://fc.deltasd.bc.ca/~mannandale/sc10/hw/EP_carbon_cycle.swf

1. Fill out all the missing information on the Carbon Cycle diagram provided.

2. Using your carbon cycle diagram answer the following questions:
   a. How many gigatonnes of carbon are exchanged from terrestrial vegetation to the atmosphere each year and what is this process called?

   b. What form of carbon is emitted from volcanoes?

   c. How long does it take for carbon to be deposited into deep stores within marine sediments and sedimentary rocks?

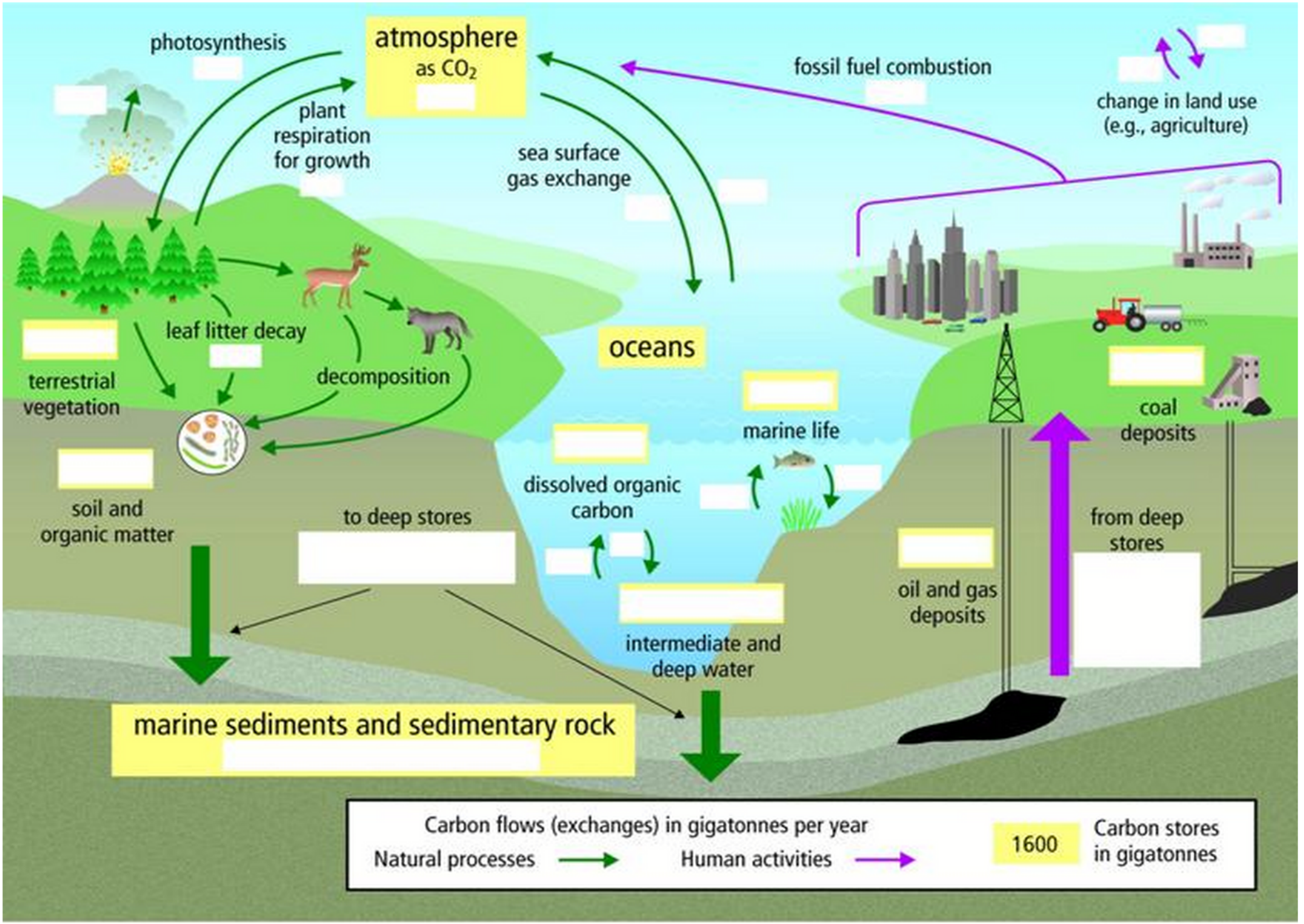
   d. How long does it take for carbon to be removed from deep stores (usually by mining or drilling of oil and coal deposits)?

   e. How much carbon is transferred to the soil through leaf litter decay and decomposition?

   f. How much carbon is emitted into the atmosphere through fossil fuel combustion each year?

   g. How much carbon is exchanged between the oceans and the atmosphere each year?

3. Write down your favourite carbon fact. (a different fact is reported in the black bar at the bottom of the diagram each time you click on one of the side menu buttons.)



The carbon cycle

Data current as of 2008

1. In which **inorganic molecule is carbon normally found ?** _____

2. **Name an organic molecule** in which carbon is found. _____

3. **What molecule do trees get their carbon from?** _____

4. **Where do primary consumers get their carbon from?** _____

5. **What process adds carbon to the atmosphere?** _____

6. **What process removes carbon from the atmosphere?** _____

7. **How does oxygen get into the water?** _____

8. **What do producers produce?** _____

9. **List 3 groups of producers?** _____ _____ _____

10. **What group eats producers?** _____ _____

11. **How does carbon get back into the atmosphere from the food we eat?**
_____

12. **Where do secondary consumers get their carbon from?** _____

13. **Where does an animal's or plant's carbon go when it dies?** _____

14. **Why should the amount of carbon in the atmosphere stay the same?**

15. **How is extra carbon getting into the atmosphere today?** _____

16. Describe **3 ways that we could reduce the extra carbon that is getting into the atmosphere.**
    1.
    2.
    3.

Name _____

Carbon Cycle Worksheet

In the space below, draw your own version of the carbon cycle. Use arrows to show which way the carbon is going.
Label:

Producers
Primary Consumers
Secondary Consumers