

EARTH CYCLES AND SUCCESSION REVIEW

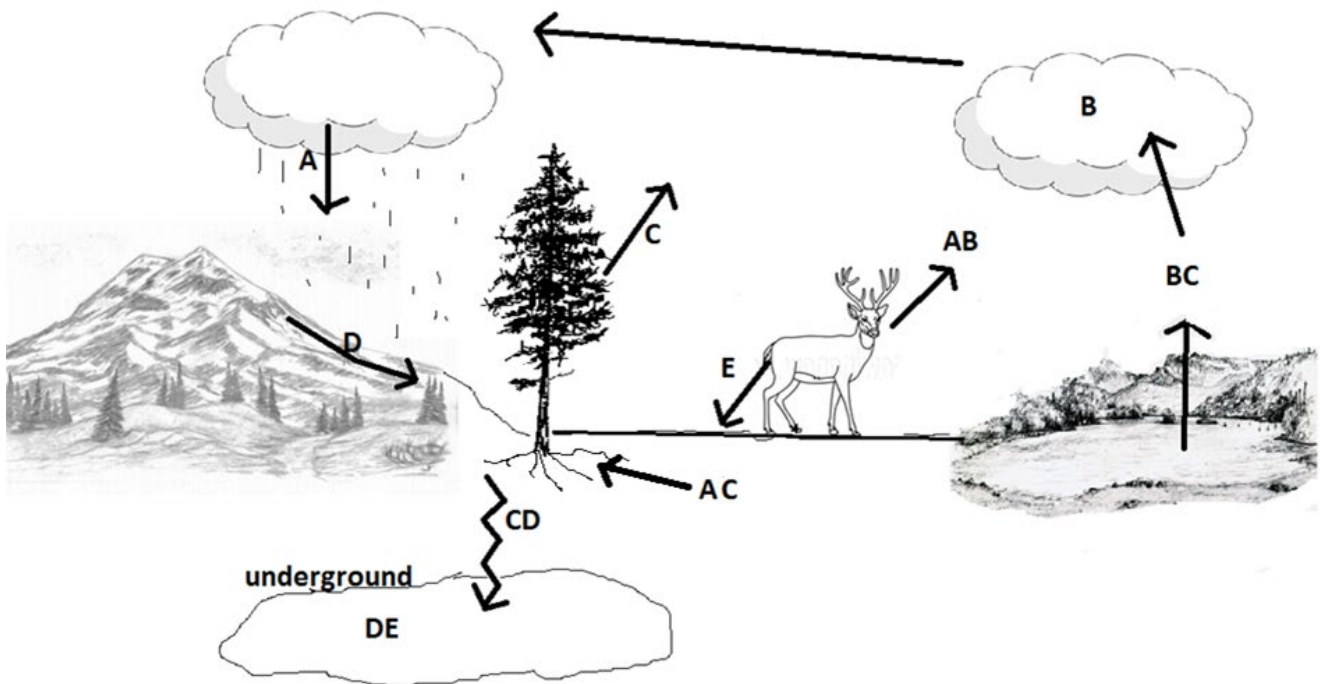
Name _____ hr ____

1. What is the rocky part of earth called which is mostly solid and extends from the crust to the core?
2. What do scientists call the sphere of earth that is water?
3. What do scientists call the sphere of earth that contains life?
4. What do scientists call the sphere of gases that surround Earth?
5. What is a reservoir?

Match the following processes that are part of the water cycle.

6.	Absorption	A	Water changing from liquid to gas and flying up into the air
7.	Condensation	B	Liquid or solid waste that exits a creature
8.	Evaporation	C	The process of breaking down sugar to get energy. It also releases water and carbon dioxide as waste.
9.	Excretion	D	Any form of water falling from the sky
10.	Infiltration	E	Water seeping into plant roots
11.	Precipitation	F	Water evaporating out of plants
12.	Respiration	G	Water changing from gas into liquid and becoming visible as a cloud
13.	Run off	H	Water flowing across land that is impermeable
14.	Transpiration	I	Water soaking into the ground

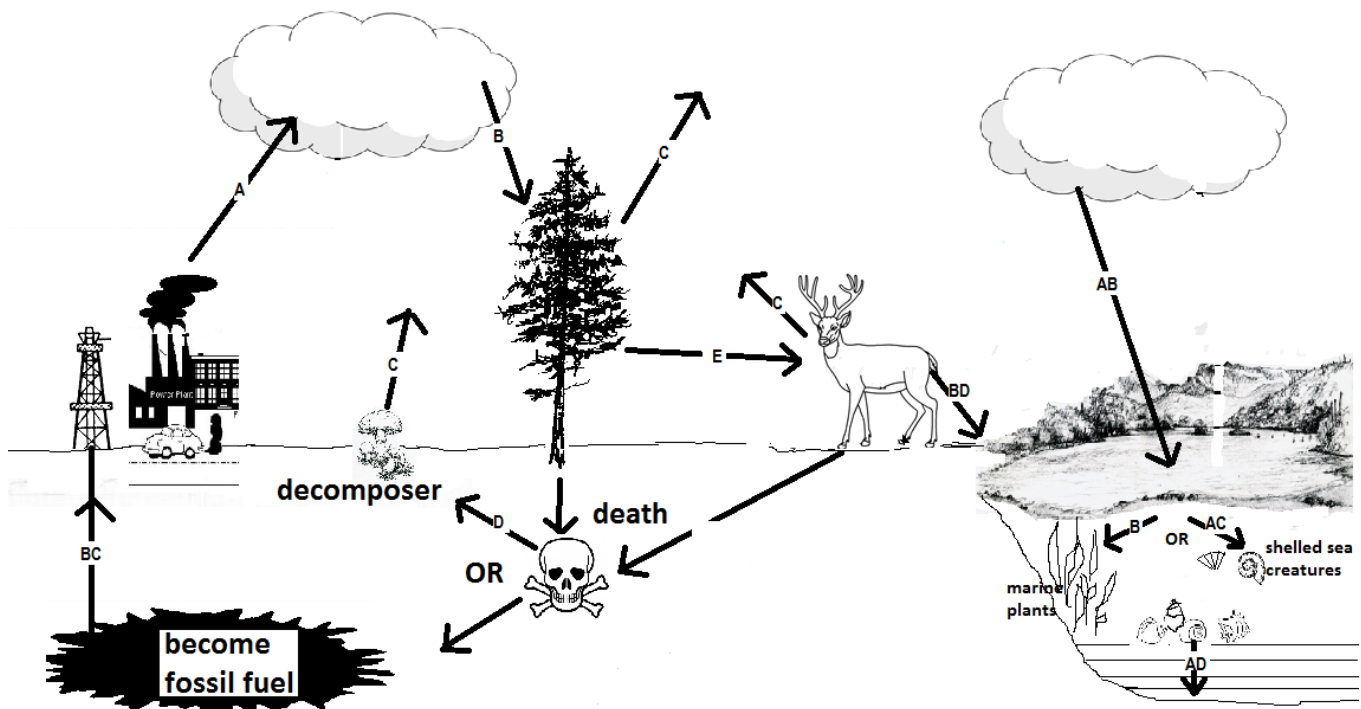
Label the water cycle below. Use the words in the matching section as your word bank



Match the following processes that are part of the carbon cycle.

15.	Biominalization	A	Eliminating carbon by waste exiting a creature's body
16.	Combustion	B	Bringing fossil fuels up out of the Earth
17.	Decomposition	C	Process of taking carbon dioxide out of the atmosphere and into the tissues of a plant
18.	Diffusion	D	Process of releasing carbon dioxide into the air due to breaking down sugar for energy
19.	Excretion	E	Process of making limestone (carbon rich rock)
20.	Extraction	F	Process of releasing carbon dioxide into the air due to burning
21.	Ingestion	G	Process of releasing carbon dioxide into the air due to bacteria rotting dead plants and animals
22.	Lithification	H	Process of forming hard shells from carbon dioxide dissolved in water
23.	Photosynthesis	I	Process of taking in carbon by eating
24.	Respiration	J	Process of carbon dioxide spreading out from the air into the water

Label the carbon cycle below. Use the words in the matching section as your word bank



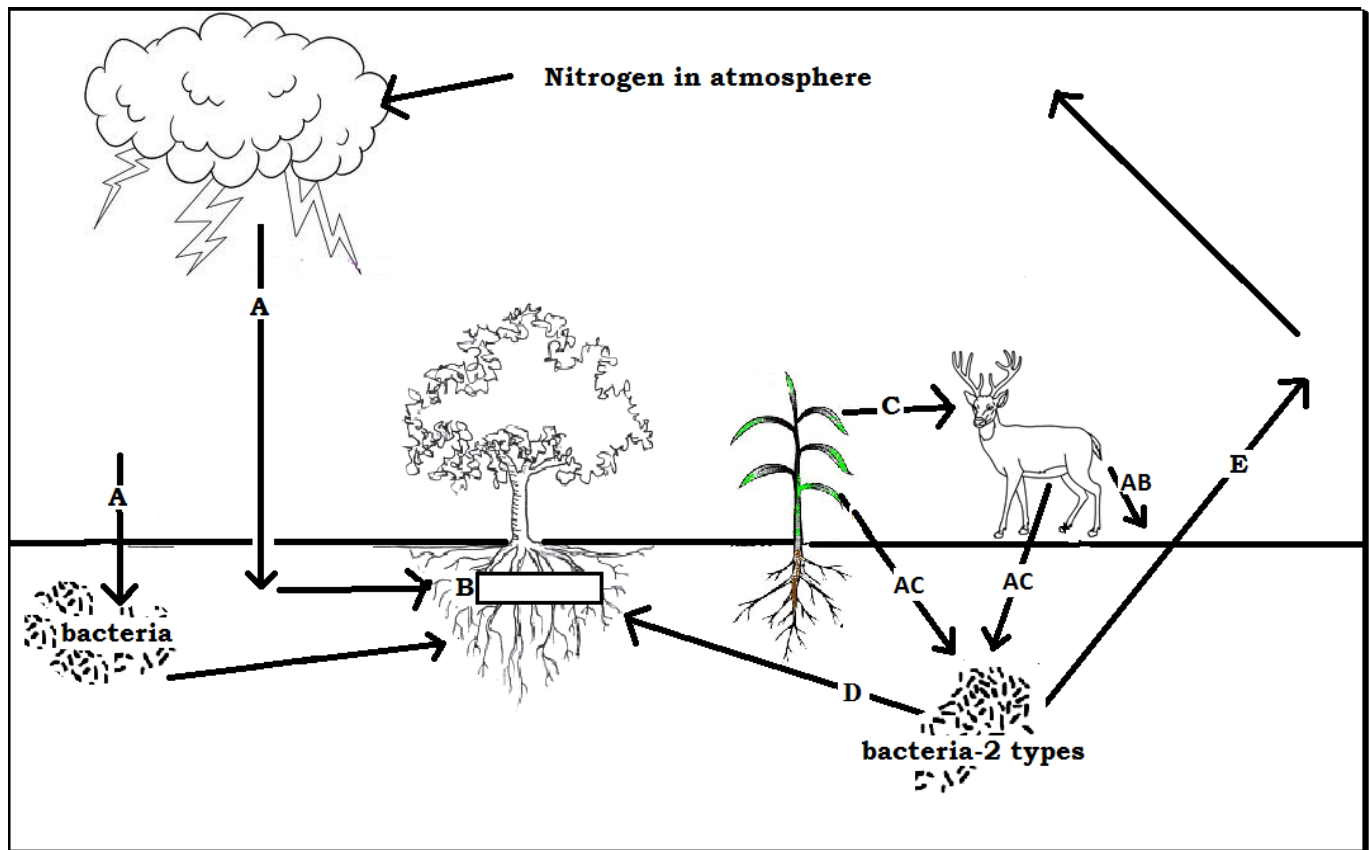
25. Why do living things need carbon?

26. How does carbon get out of limestone?

Match the following processes that are part of the nitrogen cycle.

27.	Assimilation	A	Bacteria in the soil turn nitrogen into a triple bonded molecule (n_2) and release it back into the air
28.	Decomposition	B	Turning nitrogen into a useable form. Done by lightning and soil bacteria (NH_3 ammonia)
29.	Denitrification	C	Creatures take in nitrogen by eating
30.	Excretion	D	Bacteria break down dead organisms releasing nitrogen from their bodies
31.	Nitrification	E	Nitrogen soaking into the roots of a plant
32.	Fixation	F	Solid and liquid waste which is high in nitrogen are released from creatures
33.	Ingestion/ consumption	G	Turning nitrogen into a useable form. Done by soil bacteria (NH_3 ammonia becomes $\rightarrow NO_3$)

Label the nitrogen cycle below. Use the words in the matching section as your word bank

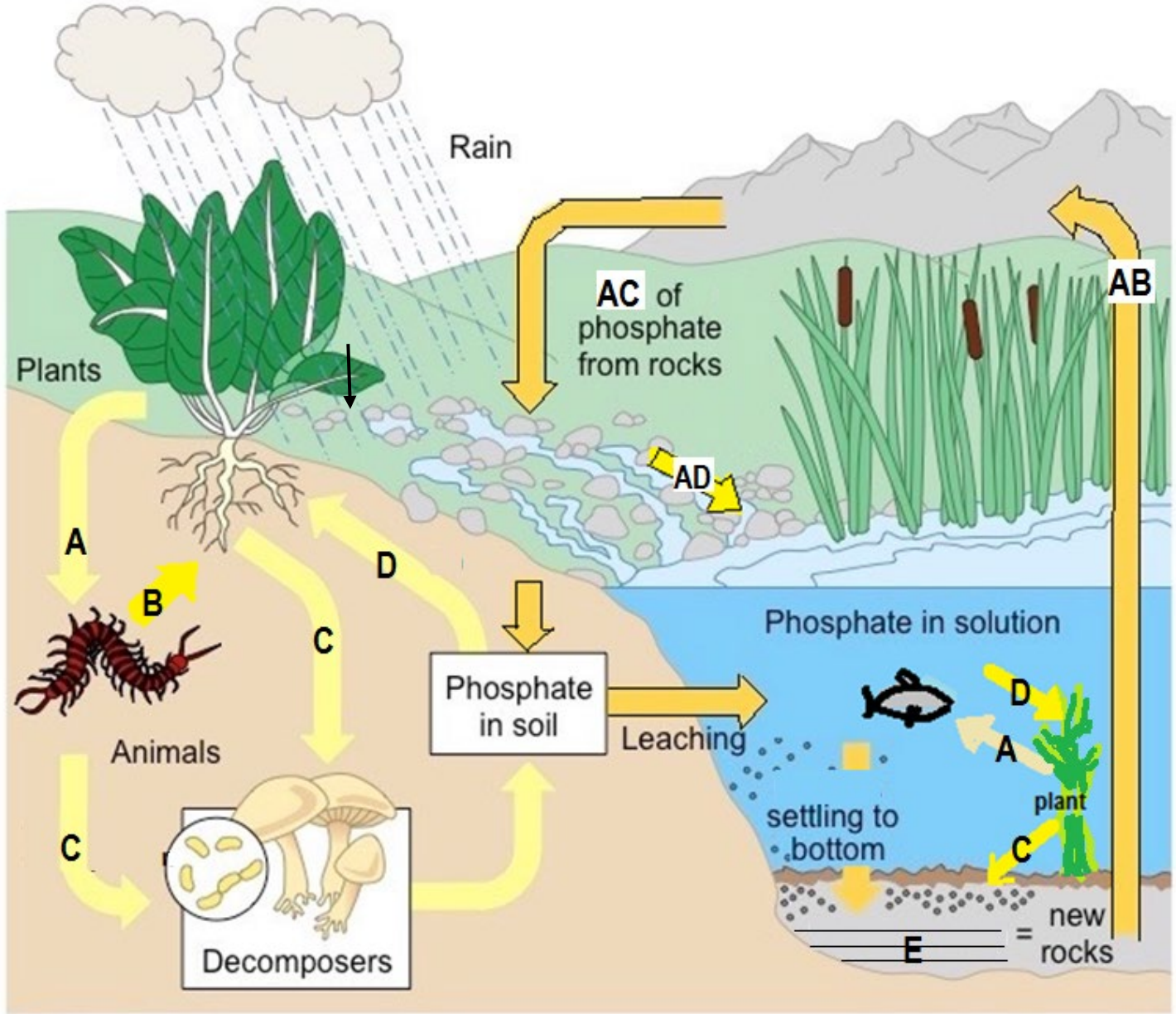


34. Why do living things need nitrogen?

35. Describe why the different cycles on Earth can be harmful if too much is released into the environment. Write about the Dead zone in the Gulf of Mexico.

36. Describe why the different cycles on Earth can be harmful if too much is released into the environment. Write about Lake Nyos in Africa.

LABEL THE PHOSPHORUS CYCLE BELOW:



37. Which sphere is left out of the phosphorus cycle?

38. Phosphorus can be locked in the earth for thousands of years due to the process of _____.

39. Once a phosphorus rock is uplifted, what 2 processes will release it so it can enter the biosphere?

- 1
- 2

40. Why do living things need phosphorus?

The phosphorus cycle includes many processes described in the above cycles. Which 3 processes are found in the phosphorus cycle but in no other cycle already mentioned? Name the 3 processes and define them.

41.	42.
43.	44.
45.	46.

47. What is detritus in the phosphorus cycle? (3 parts)

48. What does detritus become?

SUCCESSION ch 2-2

49. The Hawaiian Islands were originally bare, volcanic rock. They are now covered in lush vegetation.

How is this possible?

50. What is a pioneer species?

51. Name and describe the most common pioneer species (2pts)

1

2

52. What does a lichen get from the bare rock?

53. How is soil formed?

54. What type of plant follows lichens during succession?

55. Which comes first... ferns or grasses?

56. Which comes first large trees or shrubs?

57. What is the difference between primary and secondary succession?

58. When would there be more biodiversity, at the start of succession or at the end?

59. What is a climax species?

60. If a flood or a fire destroys a community, what type of succession begins?