WATER'S JOURNEY

This app explores the carbon cycle. Use this app to supplement your lesson on carbon and the water cycle.

For game help, visit www.carpix.org/WaterCycleGame.pdf

For additional help, to request a refund or to submit feedback, email carboncycle@caripix.org

The game component of this app is based on NASA's Water Cycle Dice Game (https://pmm.nasa.gov/education/interactive/water-cycle-dice-game) and allows students to model the journey that water may undergo as it transforms through Earth's domains.

Use the student worksheet below to help students think critically as they play the game.

Allow students to explore the glossary and the water cycle interactive page before taking the quiz.

Name: _____

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1. Where on Earth does water exist?

2. Use the chart below to record and describe how you move through the water cycle.

Water Origin	Water Destination	Process	Length of time Elapsed

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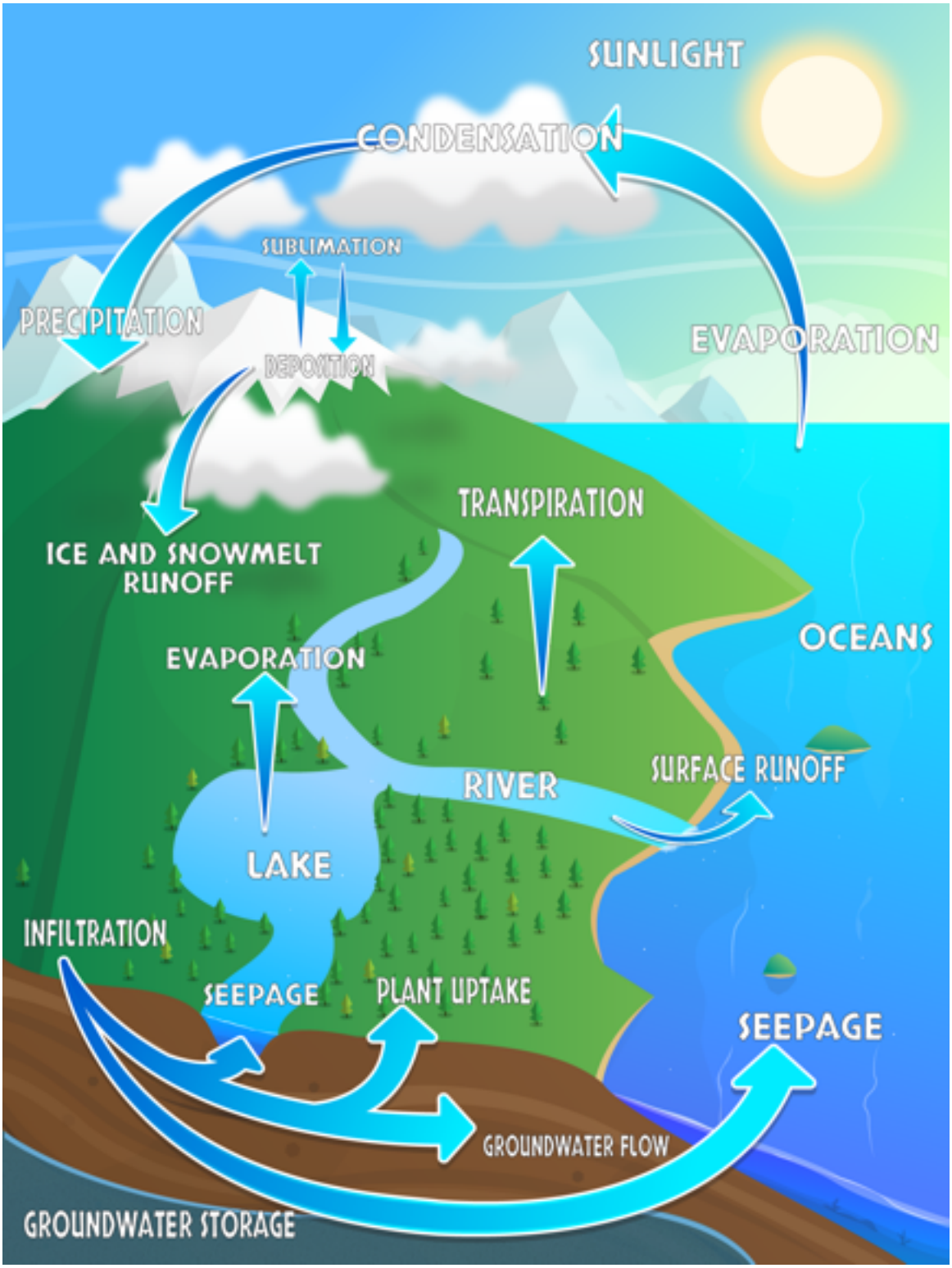

Name: _____

1. Water can dissolve many things so it is called the ...
   A. wonderful water
   B. cohesion
   C. liquid
   D. universal solvent

2. Water flows through permeable materials ___ than impermeable materials.
   A. slower
   B. faster

3. An area of land where the surface water and ground water drain into a particular body of water is called a/an ___.
   A. Watershed
   B. Aquifer
   C. Water Table
   D. Delta

4. How much of Earth's surface is covered by water?
   A. 3 percent
   B. 50 percent
   C. 70 percent
   D. 85 percent

5. What percentage of global precipitation falls on the land compared to the oceans
   A. 13 percent
   B. 22 percent
   C. 35 percent
   D. 48 percent

6. How long does it take a drop of water to travel through the water cycle?
   A. 8 to 10 days
   B. 2 to 6 months

C. 100 years
D. Thousands of years
E. It depends on the path the droplet takes

7. What is the main process by which water moves from the Earth's surface to the atmosphere?
   A. Evaporation
   B. Precipitation
   C. Sublimation
   D. Transpiration
   E. Condensation

8. In what form can we see water in the atmosphere?
   A. Lakes
   B. Rivers
   C. Clouds
   D. Oceans

9. Which of the following is NOT a way that water moves from the atmosphere to the land?
   A. precipitation
   B. deposition
   C. evaporation

10. Which of the following is not one of the three forms of water?
   A. Solid
   B. Liquid
   C. Cylindrical
   D. Gas

11. When water ___ on a solid surface like a blade of grass, dew forms.
   A. Evaporates
   B. Condenses
   C. Precipitates

12. Water stored below the Earth's surface is called...
   A. Groundwater
   B. Hidden water
   C. Storage water
   D. Ocean water

13. An aquifer is…
    A. a body of permeable rock that can contain or transmit groundwater.
    B. a large region of frozen water, often found on mountains.
    C. a large body of water inland.
    D. the name given to water in the atmosphere.

14. Water that flows over the ground surface rather than soaking into the ground.
    A. Transpiration
    B. Precipitation
    C. Runoff
    D. Melting

15. An H2O molecule is composed of ...
    A. 1 hydrogen atom and 2 oxygen atoms
    B. 2 hydrogen atoms and 1 oxygen atom
    C. 1 hydrogen atom and 1 oxygen atom
    D. 2 hydrogen atoms and 2 oxygen atoms

16. What is it called when a gas changes to a solid?
    A. Sublimation
    B. Freezing
    C. Deposition
    D. Melting

17. Water molecules _____ as they freeze.
    A. Expand
    B. Compress

18. What fuels the water cycle?
    A. Rain
    B. Solar Energy
    C. Water
    D. The Ocean

19. On a summer morning, drops of water have collected on the grass. It has not rained for days. Where did the drops come from?
    A. the sun warmed and melted frozen water
    B. blowing wind carried and dropped water
    C. water vapor in the air cooled enough to turn into liquid water

D. water drops fell from the atmosphere

20. Soil moisture (wetness) is important for:
    A. Agricultural productivity
    B. Water quality
    C. Weather and climate forecasting
    D. Ecosystem health
    E. All of the above