

Goal • Assess your understanding of terms and concepts in Unit 5.

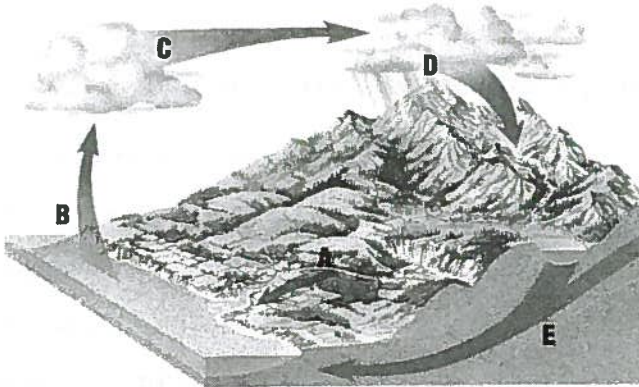
What to Do

Carefully read the instructions before answering each set of questions.

Diagram

Answer the following question in the space provided.

1. Identify the appropriate term for the letters in the diagram: precipitation, evaporation, condensation, run-off, groundwater.



- A *Run-off*
- B *Evaporation*
- C *Condensation*
- D *Precipitation*
- E *Percolation*

Matching

Match each description in column A with the correct term in column B. Place the letter for the term on the line beside the description.

A	B
<u><i>i</i></u> 2. free-floating aquatic plants	(a) crevasse
<u><i>e</i></u> 3. wearing away of rocks or soil by wind or water	(b) moraine
<u><i>d</i></u> 4. the largest of the tidal movements	(c) tidal range
<u><i>f</i></u> 5. large underground reservoir of water, found in permeable rock	(d) spring tide
<u><i>h</i></u> 6. water that is fit to drink	(e) erosion
<u><i>j</i></u> 7. variety of different organisms	(f) aquifer
<u><i>a</i></u> 8. large crack in the surface ice of a glacier	(g) detritus
<u><i>c</i></u> 9. the difference between the highest tide and the lowest tide	(h) potable
<u><i>g</i></u> 10. remains of dead organisms that provide food for decomposers	(i) phytoplankton
<u><i>b</i></u> 11. large pile of eroded rocks and debris left by a melted glacier	(j) diversity

Multiple Choice

Circle the letter for the best answer.

12. Most of the water vapour in the atmosphere evaporated from

- (a) rivers and lakes
- (b) ground water
- (c) aquifers
- (d) oceans and seas

13. The most abundant form of water on Earth is

- (a) salt water
- (b) fresh water
- (c) groundwater
- (d) atmospheric water vapour

14. Which of the following statements about glaciers is true?

- (a) Glaciers advance until they reach the ocean.
- (b) Glaciers are found only at the North Pole and the South Pole.
- (c) Glaciers can retreat even when flowing downhill.
- (d) Glaciers are composed of salt water.

15. Which of the following processes is **not** part of the water cycle?

- (a) condensation
- (b) deposition
- (c) evaporation
- (d) precipitation

16. Into which water body does water in Alberta **not** drain?

- (a) Hudson Bay
- (b) Gulf of Mexico
- (c) Great Lakes
- (d) Arctic Ocean

17. The largest amount of water leaves Alberta for
- (a) the Arctic Ocean
 - (b) the Gulf of Mexico
 - (c) Hudson Bay ✶
 - (d) the Great Lakes
18. The most run-off is generated by
- (a) pasture
 - (b) city streets
 - (c) forested hillsides
 - (d) cropland
19. What is the difference between a headwater river and a flood plain river?
- (a) A headwater river is larger and deposits more sediment.
 - (b) A headwater river is larger and deposits less sediment.
 - (c) A flood plain river is larger and deposits less sediment.
 - (d) A flood plain river is larger and deposits more sediment.
20. An aquifer is possible when the rock layers are
- (a) porous and permeable
 - (b) non-porous and permeable
 - (c) porous and impermeable
 - (d) non-porous and impermeable
21. A landfill that is contaminating local groundwater is considered to be
- (a) a point source, since the origin of the contaminants is known and from a small area
 - (b) a non-point source, since the materials in the landfill come from a large area
 - (c) a non-point source, since the contributors to the landfill are not known
 - (d) a point source, since the materials in the landfill come from a variety of people and places

22. Flooding can be the result of
- (a) slow spring melt and low precipitation
 - (b) regulation of streamflow by the use of dams and diversion canals
 - (c) rapid spring melt and high precipitation
 - (d) increased temperatures and longer summers
23. The motion of water particles in a wave are
- (a) continuously in the same direction the wave is travelling
 - (b) circular with a slow drift in one direction
 - (c) straight up and down, never moving forward or backward
 - (d) continuously in the opposite direction the wave is travelling
24. Salt in the ocean comes from
- (a) huge deposits that dissolve on the ocean floor
 - (b) salts that were dissolved from rocks by rivers and were transported to the ocean
 - (c) organisms that live in the ocean and produce salt
 - (d) rain that contains salt from pollution of the atmosphere
25. The deepest part of the ocean is the
- (a) continental shelf
 - (b) continental slope
 - (c) abyssal plain
 - (d) mid-ocean ridge
26. Why do breakers form near shore?
- (a) The bottom of a wave is held back by friction, while the crest continues at the same speed to form a breaker.
 - (b) Waves are affected much more by wind as they near shore.
 - (c) Incoming waves collide with the outgoing tide, causing turbulence and breakers.
 - (d) Sand picked up near shore makes the waves larger, and they become breakers.

27. Surface currents in the ocean are **not** influenced by
- (a) the uneven heating of Earth by Sun
 - (b) the rotation of Earth
 - (c) the shapes of the continents
 - (d) the position of Moon and Sun
28. How do ponds differ from lakes?
- (a) Light can reach the entire lake bed, so very few plants can grow.
 - (b) Light can reach the entire bottom of a pond, so plant life is found everywhere.
 - (c) Light reaches only the shallow water near shore in a lake, so plant life is everywhere.
 - (d) Light reaches only the shallow water near shore in a pond, so very few plants can grow.
29. Which of the following adaptations can be found on a plant in a fast-moving stream?
- (a) buoyant structures
 - (b) gills
 - (c) holdfast
 - (d) streamlined structure
30. Plankton are adapted to
- (a) attaching to rocks and other organisms
 - (b) chasing other organisms
 - (c) floating freely
 - (d) surviving where there is no light
31. When a body of water is polluted with excess nutrients, there is usually
- (a) an algal bloom
 - (b) nothing left living in the water
 - (c) too much dissolved oxygen
 - (d) a more stable food chain

32. Hard water refers to

- (a) the way that water freezes quickly
- (b) the fact that there is nothing dissolved in the water
- (c) how difficult it is to remove pollutants from the water
- (d) water with calcium and magnesium dissolved in it

33. Acid precipitation is caused by

- (a) burning fossil fuels, which release sulfur and nitrogen oxides into the air
- (b) dumping of wastes into rivers, streams, and lakes
- (c) a change in aquatic life as a result of global warming
- (d) acidic water evaporating from the ocean

34. Bioindicator species are species that

- (a) are unaffected by water temperature or quality
- (b) have become extinct as a result of pollution
- (c) live only in water with specific qualities, such as pH and temperature
- (d) change their form or colour when water quality changes

Paragraph Answer

Answer the following question in paragraph form.

35. Explain how water is purified for drinking purposes.

→ Be able to explain

• boiling

• filtering

• Chemical treatment (water treatment plants)