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Study Questions: Streams

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The quiz about streams will involve questions like the ones that follow.

Note: Whenever you see reference to Tarbuck, in the following questions, that means the eText of the textbook by Tarbuck and others, Earth

- 1. What do we call water that flows across the ground surface during and immediately after a rainstorm?
- 2. What landform develops at the end of a stream, at or near base level, that constitutes a river's distributary system?
- 3. Where are point bars found at a meander loop of a stream: on the inside of the loop (closer to the center of the arc) or on the outside of the loop?
 - 4. What forms the boundary between adjacent drainage basins?
 - 5. What are examples of materials that may be transported in solution by a stream?
 - 6. What are examples of materials that may be transported by suspension in a stream?
 - 7. What are examples of materials that may be transported by saltation or rolling in a stream?
 - 8. What is a flood?
 - 9. What do we call an area that has a 1-in-100 chance of being flooded during any given year?
 - 10. Is it ever a good idea to buy or build a residence (or any other building to be occupied by humans) within a 100-year floodplain?
 - 11. What is the term we use to describe the volume of water that passes by a given point along a stream during a specific unit of time (e.g., 40,000 liters per minute)? 12. In what direction does surface water generally flow relative to topographic contours; parallel to the contours, perpendicular to the
 - contours, oblique to the contours, or in no particular direction relative to the contours?
 - 13. Under normal-flow conditions, where is *erosion* a more important process in modifying a stream; along a cut bank, along a point bar, across the flood plane, in an oxbow?
 - 14. During a flood in which the whole flood plain is covered by flowing water, how does the velocity of water in the stream channel compare with the velocity across the rest of the submerged floodplain (i.e., across the overbank area) where the water is more shallow than in the
 - channel?
- 15. How does the *gradient* of a typical stream vary (if at all) in going downstream from the headwaters to the base of the stream?
- 16. How does the discharge of a typical stream vary (if at all) in going downstream from the headwaters to the base of the stream?
- 17. How does the *channel width* of a typical stream vary (if at all) in going downstream from the headwaters to the base of the stream?
- 18. How does the water velocity of a typical stream vary (if at all) in going downstream from the headwaters to the base of the stream?
- 19. How does the total sediment load of a typical stream vary (if at all) in going downstream from the headwaters to the base of the stream just above the delta?
- 20. The gradient of a stream is determined by dividing (what quantity?) by (what quantity?).
- 21. What type of stream typically forms where there is a superabundance (a whole lot) of loose sediment (typically sand and gravel) being transported?
- 22. What type of stream has just one active channel that has a very curvy shape, and that flows down a surface with a very low gradient?

23. What type of stream is characterized by having several channels containing flowing water, separated by sand/gravel bars?

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