Watershed Lab /21 name_____hr__

Objective:

- Identify that runoff from a certain area is the primary source of water in a stream.
- Identify how water travels through all parts of a watershed (rivers, streams, lakes, groundwater, etc.)
- Be able to define **watershed**, **drainage basin**, **tributary**, **upper basin**, **lower basin, runoff**

Materials:

- Plastic landform
- Beaker with water
- Eye dropper
- Colored pencils

Procedures:

1. Place the white plastic landform in the middle of the table so all lab members have access.
2. Now "rain" all over the landform by dropping water (with eyedroppers) onto the different locations to analyze the flow of water. After a while you will see where the island's major river and tributaries are located.
3. If a drop gets "Stuck" simply add more water to the drop. Eventually the water should flow off the island.
4. When all the water dropper experimentation is done, dry off the landform completely.
5. Use a marker to draw the boundaries of the watershed / drainage basin. Draw on the white landform with the marker. Call me over to get your boundaries approved. TEACHER SIGNS HERE -> ____ (1pt)
6. Make a map of your island in your notebook. Your teacher will tell you which page.
7. Draw the following onto the map: major river (dark blue), tributaries (blue), and boundaries of drainage basins (red). (3pts)
8. Draw the following on your map:
    a. Name your watershed (1pt)
    b. Put arrows on all streams to show the direction of flow (2pts)
    c. Name the major river and any lakes or ponds (2pts)
    d. Put an "U" in the upper parts of each basin (there are several) (1pt)
    e. Put a "L" in the lower part of each basin (1pt)
    f. The plastic landform was designed in order to not spill water. On real landforms there would have been one area where all the water left the landform. On your drawing, place an arrow where you want all the water to leave. (1pt)
9. Make sure your table is completely dry before you leave. If any water spilled on the floor, clean that up as well.

Analysis Questions:

1. What is the water cycle?

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2. What is runoff?

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3. What is a tributary?

_____

4. What is a drainage basin?

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5. What is a watershed?

_____

6. What is meant by "upper basin?"

_____

7. What is meant by "lower basin?"

_____

8. What is groundwater?

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9. Can groundwater be part of a watershed? Explain. (2pts)

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