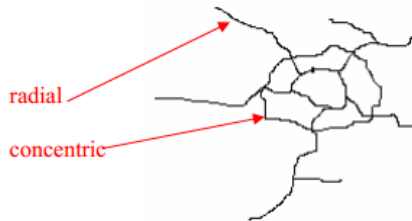


Glass and Soil Worksheet – Answers

From B. Sapp

1.



2. Although the examination of a single crack may indicate a degree of similarity, the overall composition and shape of cracks in these two types of glass differ significantly. Plain glass will yield true radial and concentric fractures which are similar to the sketch above. Tempered glass, however, has been designed to fracture in a very different way. Tempered glass is designed to crack in such a way as when broken apart each broken piece of glass will be basically round with few pointed edges.

3.



Whole on the left was penetrated first, as evidenced by the cracks from the whole on right terminating at the existing fracture lines.

4. Dry samples; pulverize samples; visual comparison; UV comparison; Microscopic comparison; comparison in density gradient tubes.

1. F
2. F
3. F
4. F
5. F
6. T
7. F
8. F
9. T
10. F
11. T
12. F
13. F
14. F
15. F
16. The following has been determined using a balance and a graduated cylinder. Make the correct calculations needed for finding information to build a density column using the three substances below. Then explain how to assemble the column. Also explain why the column should be assembled in this way

10.0 ml of dawn was found to have a mass of 12.37 g

D = 1.237 g/ml -bottom

20.0 ml of styling gel was found to have a mass of 22.25 g

D = 1.1125 g/ml -middle

4.25 g of moose was found to occupy 5.0 ml of volume

D = 0.85 g/ml –top