Separation of Mixtures

Techniques used to separate mixtures are based upon differences in the physical properties of the components of mixtures.

What physical property is being used for the following separation techniques?

- Distillation
- Centrifuging

- Chromatography
- Manual separation with a magnet

• Crystallization

• Manual separation with tweezers

• Filtration

Identify an appropriate separation technique or series of techniques that would separate the following mixtures.

- 1. Rocks and sand
- 2. Water and sugar
- 3. Marbles of different sizes and colors
- 4. Iron filings and sodium chloride (table salt)
- 5. Alcohol and water
- 6. Sawdust and table salt
- 7. Sand, table salt, and water
- 8. The components of black ink
- 9. Blood (cells and plasma)
- 10. Chalk, small pebbles, and water