1. A student is filtering a mixture of sand and salt water into a beaker. What will be found in the beaker after the filtration is completed?

   A) sand, only
   B) salt, only
   C) sand and salt
   D) salt and water

2. By which process is a precipitate most easily separated from the liquid in which it is suspended?

   A) neutralization
   B) distillation
   C) condensation
   D) filtration

3. Recovering the salt from a mixture of salt and water could best be accomplished by

   A) evaporation
   B) filtration
   C) paper chromatography
   D) density determination

4. Which process would most effectively separate two liquids with different molecular polarities?

   A) filtration
   B) fermentation
   C) distillation
   D) conductivity

5. A mixture of crystals of salt and sugar is added to water and stirred until all solids have dissolved. Which statement best describes the resulting mixture?

   A) The mixture is homogeneous and can be separated by filtration.
   B) The mixture is homogeneous and cannot be separated by filtration.
   C) The mixture is heterogeneous and can be separated by filtration.
   D) The mixture is heterogeneous and cannot be separated by filtration.

6. At room temperature, a mixture of sand and water can be separated by

   A) ionization
   B) combustion
   C) filtration
   D) sublimation

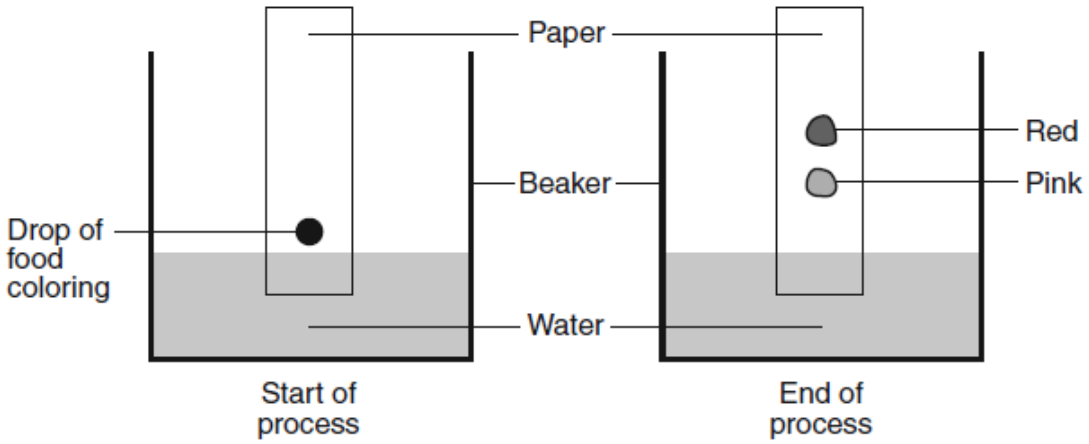
7. A mixture of sand and table salt can be separated by filtration because the substances in the mixture differ in

   A) boiling point
   B) density at STP
   C) freezing point
   D) solubility in water

8. Which two physical properties allow a mixture to be separated by chromatography?

   A) hardness and boiling point
   B) density and specific heat capacity
   C) malleability and thermal conductivity
   D) solubility and molecular polarity

9. Given the diagram representing a process being used to separate the colored dyes in food coloring:



Which process is represented by this diagram?

A) chromatography
B) electrolysis
C) distillation
D) titration