Miscible Liquids

Pure liquids:

- **water**
  - Temperature: 100°C
  - Mass of 1 mole: 18 g/mol
  - Molar volume: 18 mL

- **ethanol**
  - Temperature: 78 °C
  - Mass of 1 mole: 46 g/mol
  - Molar volume: 36.3 mL

- **pentane**
  - Temperature: 36 °C
  - Mass of 1 mole: 72 g/mol
  - Molar volume: 45 mL

- **decane**
  - Temperature: 174 °C
  - Mass of 1 mole: 142 g/mol
  - Molar volume: 104 mL

**Name**

- **name**

Supplies:

- 100 mL bottles containing the liquids
- Waste jar
- 200 mL bottle of water
- 100 mL graduated cylinder
- 50 mL graduated cylinder
- Parafilm or plastic wrap
- 16, 15 mL vials with caps
- Thermometer or temperature probe

What liquids are likely to be miscible? Do the physical properties change when you mix miscible liquids?

Design a procedure to test your hypothesis.

Observations

Conclusions