

Quiz-Quiz-Trade: Mixtures and Solutions

Goal • Use this quiz-quiz-trade activity to build your understanding of the concepts in Unit 3.

What to Do

1. **Quiz** Each card has a question at the top and an answer at the bottom. Take a card and choose a partner. Ask the question on your card. If your partner answers correctly, move to step 2. If your partner answers incorrectly, or doesn't know, share the answer, then move to step 2.
2. **Quiz** Repeat step 1 with the other partner using his or her card.
3. **Trade** Trade cards with your partner. Find a new partner and start the quiz-quiz-trade again.

<p>Question: Is air a mixture or a pure substance?</p> <p>Answer: Mixture</p> <p>Chapter 7</p>	<p>Question: Which is a pure substance: silver, steel, or toothpaste?</p> <p>Answer: Silver</p> <p>Chapter 7</p>
<p>Question: Which is a mixture: distilled water, Kool Aid™, or sugar?</p> <p>Answer: Kool Aid™</p> <p>Chapter 7</p>	<p>Question: Which is a homogeneous mixture: sweetened tea, fruit smoothie, or raspberry slush?</p> <p>Answer: Sweetened tea</p> <p>Chapter 7</p>
<p>Question: Which contains a heterogeneous mixture: orange juice with pulp, sweetened tea, or Kool Aid™?</p> <p>Answer: Orange juice with pulp</p> <p>Chapter 7</p>	<p>Question: Is a solution a mixture or a pure substance?</p> <p>Answer: Mixture</p> <p>Chapter 7</p>

<p>Question: In a beaker of salt water what is the solvent?</p> <p>Answer: Water</p> <p>Chapter 8</p>	<p>Question: In a beaker of salt water, what is the solute?</p> <p>Answer: Salt</p> <p>Chapter 8</p>
<p>Question: Are solutions heterogeneous or homogeneous?</p> <p>Answer: Homogeneous</p> <p>Chapter 8</p>	<p>Question: Brass is made from zinc which is dissolved in copper. Which substance is the solute?</p> <p>Answer: Zinc</p> <p>Chapter 8</p>
<p>Question: Oil does not dissolve in water. Is oil soluble or insoluble in water?</p> <p>Answer: Insoluble</p> <p>Chapter 8</p>	<p>Question: Styrofoam™ cannot be painted with spray paint because the spray paint will dissolve the Styrofoam™. Is Styrofoam™ soluble or insoluble in spray paint?</p> <p>Answer: Soluble</p> <p>Chapter 8</p>

<p>Question: Is “100g of salt” a quantitative or qualitative description?</p> <p>Answer: Quantitative</p> <p>Chapter 8</p>	<p>Question: To pickle beets, you use a concentrated solution of vinegar and sugar. Is this a quantitative or qualitative description?</p> <p>Answer: Qualitative</p> <p>Chapter 8</p>
<p>Question: A cup of sweetened hot tea has been stirred but still has undissolved sugar crystals at the bottom of the cup. Is the solution saturated or unsaturated?</p> <p>Answer: Saturated</p> <p>Chapter 8</p>	<p>Question: Which solution is more dilute: sweetened or unsweetened tea?</p> <p>Answer: Unsweetened</p> <p>Chapter 8</p>
<p>Question: Which solution is more concentrated: a paste of laundry detergent or liquid detergent in water?</p> <p>Answer: Paste</p> <p>Chapter 8</p>	<p>Question: Which is more concentrated: 5 g/L or 10 g/L of fertilizer in water?</p> <p>Answer: 10 g/L</p> <p>Chapter 8</p>

<p>Question: Express 500 g/L in g/mL.</p> <p>Answer: 0.5 g/mL</p> <p>Chapter 8</p>	<p>Question: Which unit of concentration measures the ratio of the mass of a solute in the mass of a solution?</p> <p>Answer: ppm (parts per million)</p> <p>Chapter 8</p>
<p>Question: Which unit of concentration measures the percentage of solute in a solution by mass?</p> <p>Answer: Percentage by mass</p> <p>Chapter 8</p>	<p>Question: In which solvent will more salt dissolve: hot water or cold water?</p> <p>Answer: Hot water</p> <p>Chapter 8</p>
<p>Question: Salmon rivers are often closed in the summer when the temperatures are high and water levels are low. How do high temperatures affect the oxygen content of the water?</p> <p>Answer: High temperatures result in low oxygen content.</p> <p>Chapter 8</p>	<p>Question: Why do crystals appear when a syrup mixture made of butter and brown sugar cools?</p> <p>Answer: The cooler syrup is not able to dissolve as much sugar as the hot syrup.</p> <p>Chapter 8</p>

<p>Question: What methods would you use to separate a mixture of salt and sand?</p> <p>Answer: Dissolving, filtration, and evaporation</p> <p>Chapter 9</p>	<p>Question: In a junkyard, what method does a crane operator use to separate the metal scrapped cars from other debris?</p> <p>Answer: Magnetism</p> <p>Chapter 9</p>
<p>Question: Which three processes are used in distillation?</p> <p>Answer: Boiling, evaporation, and condensing</p> <p>Chapter 9</p>	<p>Question: What type of distillation is used to separate two or more solutes from a solution based on their boiling points?</p> <p>Answer: Fractional distillation</p> <p>Chapter 9</p>
<p>Question: Ethylene glycol freezes at -35°C. What is the benefit of using windshield washer fluid with a high concentration of ethylene glycol in the winter?</p> <p>Answer: The washer fluid won't freeze in very cold temperatures.</p> <p>Chapter 9</p>	<p>Question: During a distillation, in order, what are the states of matter involved?</p> <p>Answer: Liquid, gas, liquid</p> <p>Chapter 9</p>