

Name: \_\_\_\_\_

Unit 8 Lesson 1 Quiz

1. Khalil cuts a stick of butter in half. Which statement about the butter is **true** ?
  - A. ☐ The butter has changed state.
  - B. ☐ The butter has different ingredients.
  - C. ☐ The butter has kept its shape.
  - D. ☐ The butter has different physical properties.
2. These ice cubes were taken from the freezer and set out on the counter. This picture shows what the ice looks like 5 minutes later.



What is causing this physical change?

- A. ☐ Heat energy is moving from the ice to the air.
  - B. ☐ Heat energy is moving from the air to the ice.
  - C. ☐ Heat energy is causing the liquid water to freeze.
  - D. ☐ Heat energy is moving between the two ice cubes.
3. Air is a mixture that contains about 80 percent nitrogen and about 20 percent oxygen. Which statement is **true** ?
  - A. ☐ Oxygen is a solvent.
  - B. ☐ Nitrogen is a solvent.
  - C. ☐ The two gases cannot be separated.
  - D. ☐ The two gases can melt to form water.
4. On a hot summer day, Jenna poured juice into an ice cube tray. She put the tray into the freezer. When she removed the tray, the juice was frozen. How many physical changes took place from the time Jenna poured the juice until it came out of the freezer?
  - A. ☐ 1
  - B. ☐ 2
  - C. ☐ 3
  - D. ☐ 4

5. Mario is oiling the wheels of his skateboard. He tries to wash the oil off his hands with only water, but nothing happens. What would happen if he added a few drops of dish soap?
- A. ☐ The oil would stick to his hands.
  - B. ☐ The oil would change into a gas.
  - C. ☐ The oil, water, and soap would form a solution.
  - D. ☐ The soap would help break up the oil into smaller drops

