

Name: _____ Date: _____

The Floor is Lava: Kindergarten States of Matter Challenge

Molecular movement, shape-shifting properties, and phase transitions. Young scientists design materials to solve cooling and heating puzzles.

1. If you want to build a bridge for a toy car that doesn't sag or spill, you must use a _____ because its tiny parts are packed tight and stay in one shape.

- A. Liquid
- B. Solid
- C. Gas
- D. Cloud

2. If you pour orange juice from a round bottle into a square box, it will change its shape to look like the box.

- A. True
- B. False

3. You are a scientist mixing 'invisible air' for a balloon. Which of these acts like a gas by zooming around to fill up every corner of the balloon?

- A. A pile of sand
- B. A block of wood
- C. The air you breathe
- D. A puddle of milk

4. Imagine you have a magic popsicle. If you leave it in the hot sun, what happens to the tiny parts (particles) inside it?

- A. They stop moving entirely
- B. They start dancing and sliding past each other
- C. They turn into hard rocks
- D. They shrink and disappear

5. When steam from a hot cocoa touches a cold window and turns back into watery drops, the gas is _____ into a liquid.

- A. Freezing
- B. Melting
- C. Condensing
- D. Exploding

6. A rock can be a liquid if you just put it in a small enough cup.

- A. True
- B. False

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7. Which 'State of Matter' is like a group of kids sitting in their chairs during circle time without moving around?

- A. Liquid
- B. Gas
- C. Solid
- D. Wind

8. If you take energy (heat) AWAY from a bowl of liquid water by putting it in a freezer, the water will _____ and become a solid.

- A. Boil
- B. Freeze
- C. Vanish
- D. Run

9. You see a 'mist' rising off a lake in the morning. This is an example of molecules moving from the water into the air as a:

- A. Solid
- B. Gas
- C. Hard rock
- D. Metal

10. Gases are the only state of matter that will spread out to fill up a whole giant gym if you let them out of a jar.

- A. True
- B. False