

Name: _____ Date: _____

Answer Key: Think Like a Tiny Einstein: Is Common Sense Lying to You?

Kindergarteners synthesize high-level concepts like teleportation and hidden dimensions to evaluate why our physical world behaves so strangely.

1. If you had a magic toy that could be in two different toy boxes at the exact same time without breaking, what would a scientist call that?

Answer: B) Quantum Superposition

In quantum superposition, tiny particles can exist in multiple states or places at once until someone looks at them.

2. Imagine moving so fast that you arrive at school before you even left home! Scientists use very fast ___ to explain how time can change.

Answer: A) Light

Modern physics shows that as objects move closer to the speed of light, time actually slows down for them.

3. True or False: If you jumped into a deep 'hole' in space called a Singularity, you would be stretched out like a long piece of spaghetti.

Answer: A) True

This is a real physics term called 'spaghettification' caused by the extreme gravity of a black hole.

4. Imagine the universe is like a giant trampoline. If you put a heavy bowling ball in the middle, it makes the surface curve. What does this curve create?

Answer: C) Gravity

General Relativity teaches us that gravity is actually the curving of space and time around heavy objects.

5. If you had a 'Quantum Tunnel' in your bedroom wall, you could walk ___ the wall without using the door!

Answer: C) Through

Quantum tunneling allows tiny particles to pass through barriers that seem impossible to cross.

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6. True or False: Scientists believe there might be extra 'invisible' directions (dimensions) that are curled up so tiny we can't see them.

Answer: A) True

String theory suggests the world has many more dimensions than the three we use to move around.

7. If you have two 'Entangled' magic marbles and you change one to the color red, what happens to the other marble instantly, even if it is on the Moon?

Answer: B) It turns red too

Quantum entanglement means two particles are linked; what happens to one affects the other immediately, no matter the distance.

8. True or False: According to physics, your body is made of tiny bits of energy that are actually vibrating 'strings.'

Answer: A) True

Modern theories suggest that the smallest building blocks of life are vibrating loops or strings of energy.

9. When scientists look at the smallest things in the world, they find that everything is a little bit fuzzy or _____. They can't know everything at once!

Answer: B) Uncertain

The Uncertainty Principle says we cannot know the exact speed and position of a particle at the same time.

10. Which of these acts like both a tiny bouncing ball and a wiggly ocean wave at the same time?

Answer: C) A particle of light

Light has 'wave-particle duality,' meaning it behaves like a wave and a particle depending on how we measure it.