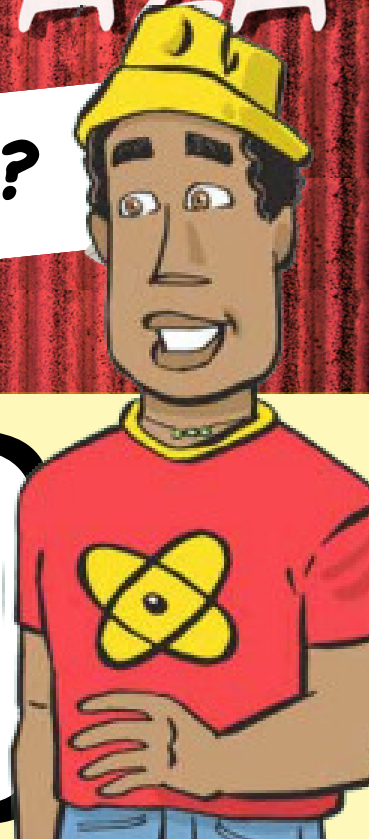


SCIENCE SPAZA

ACTIVITY 2: 2024

WHICH LINE IS LONGER?



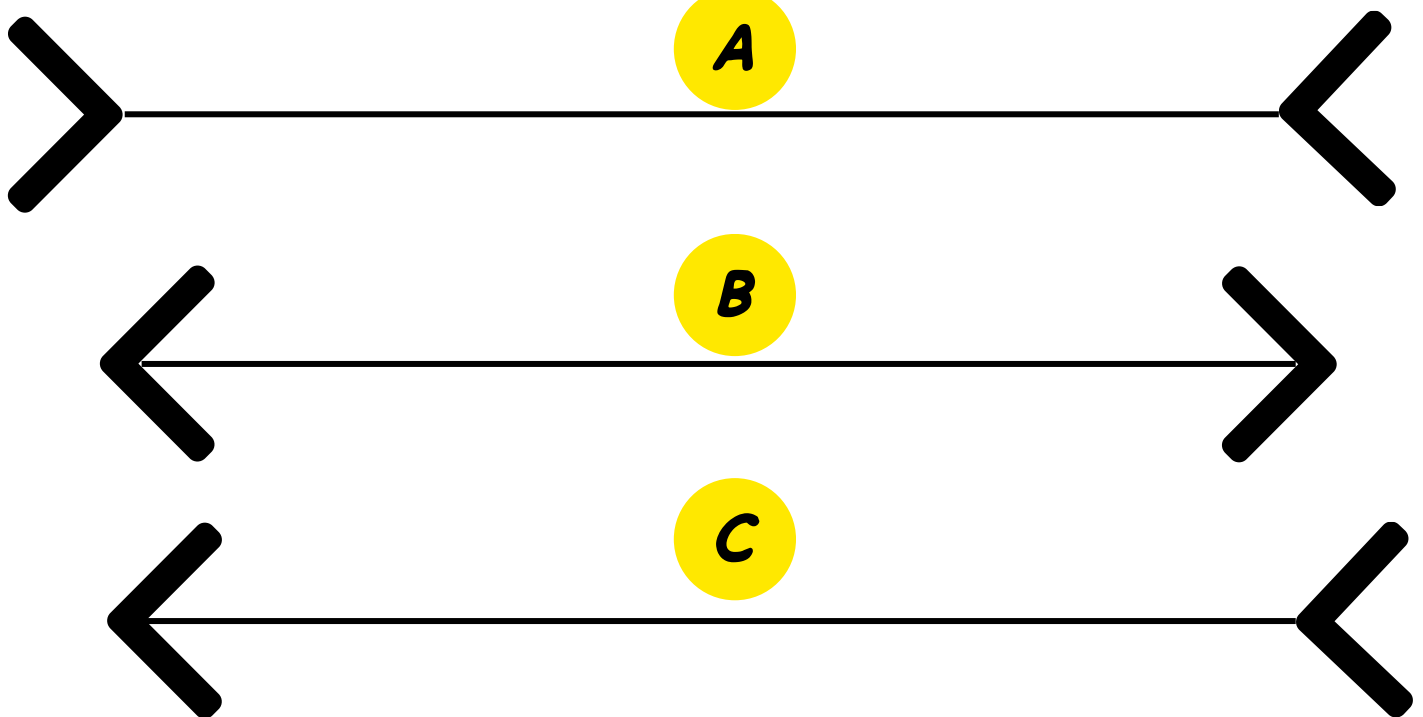
Have you ever heard of an 'optical illusion'?

This is when certain shapes and patterns are used to make objects look like they are moving, changing in size, or different from what they really are.

LET'S TRY IT...

YOU WILL NEED:
A RULER OR STRING

1. Take a look at these lines. Which one is the longest, and which is the shortest: A, B or C?
2. Now take a ruler, or piece of string, and measure them. Did you get it right?

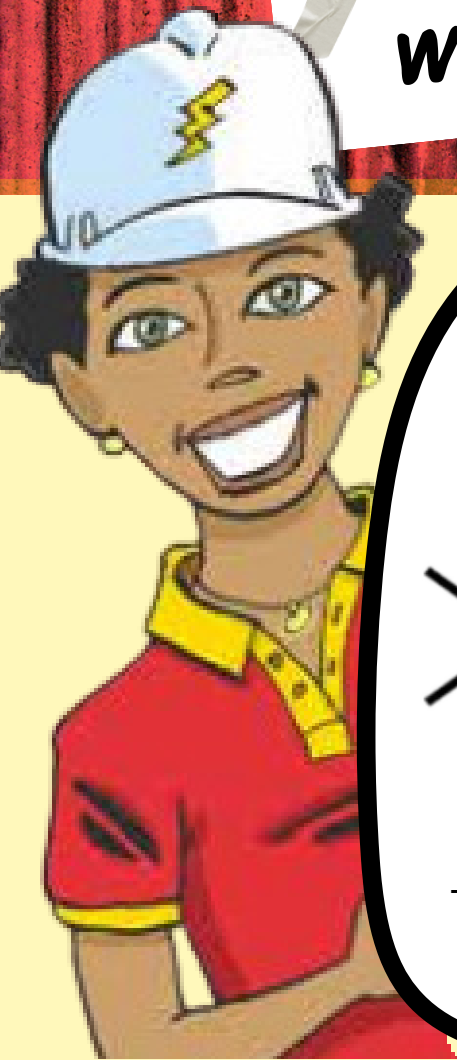


SCIENCE SPAZA

ACTIVITY 2: 2024

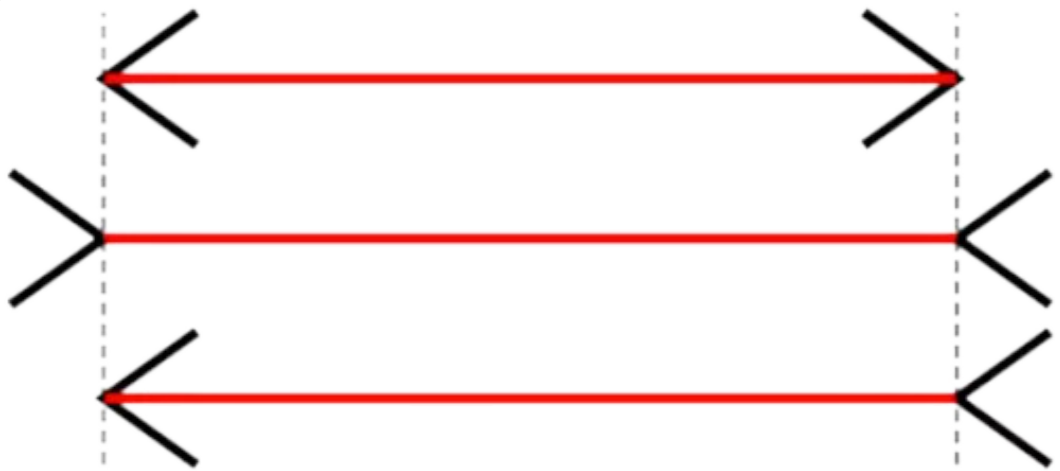
WHICH LINE IS LONGER?

PAGE 2



The answer: $A = B = C!$

Each line is exactly the same length!



This is called the **Müller-Lyer illusion**, where the way the arrows are placed make the lines look like they are different.

HOW DOES IT WORK?

Optical illusions are pictures that show our brains information or patterns that don't quite add up, making us see it differently from what is really there.

When we look at things, our eyes send signals to our brains to tell us what we're seeing. But sometimes, our brains can get a little confused by certain patterns or shapes, especially when they're arranged in a clever way.

In the Müller-Lyer illusion most people think that line A is the longest. Why? Because the arrows give our brains a sneaky hint that the line is longer than it actually is. It's like our brains are playing a trick on us!