

Why are TV screens Red, Green, and Blue and not Red, Yellow, and Blue?

If you look really closely at a TV screen, have you ever seen that they have little bars of color that flash to make the picture you see? While we usually think of the three most important colors as the **primary colors** (RED, YELLOW, and BLUE), in color television, the three most important colors are actually **RED**, **GREEN** and **BLUE**!

This is called **TRICHROMACY**.

Your eyes have special cells in them that are called **CONES**. Your eyes have 3 types of cones, and each one has a color they are very good at seeing. One cone is best at seeing **RED** light, one is best at seeing **GREEN** light, and one is best at seeing **BLUE** light. The reason why this is different from the primary colors is because primary colors are a really good way to mix colors that you see on things. But the **trichromatic colors** used on TV screens are really good at mixing colors to see light. Since TV screens are made up of a bunch of light pieces of light, the **trichromatic colors** are the best ones to use for the job!

What types of colors are used on a TV screen?

What is the name of the cells in your eyes that are good at seeing certain colors?

What are primary colors really good at mixing colors for?

Why do you think it's called trichromacy? Hint: What does "tri" remind you of?

If you finish this worksheet and bring it to the front desk, you'll get a surprise!

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