

CASE NAME: COLOR ME CRAZY
ATTENDING OFFICER(S): DREW HOSKINS & MIKE JANNEY
LOS ANGELES POLICE DEPARTMENT
CRIME LOCATION: STUDIO 1407



Answer: MARMALADE

Each piece of advice has a color embedded in it.

Sweat from your **brow**: not her problem!

If you fall **in**, **dig** out

If you can't **agree**, **nachos**

When in doubt, read the **tea** leaves

If you smash an **egg**, **plan** to clean it up

Avoid any **cop** perimeters

If you stick your finger in the pan, you'll get a **hot pinky**

Love each other like gladiators in an **arena**, **vying**

Go, **live** in Dubai

Shuttle **money** back and forth, but don't launder it

Mosquitos near your **porch**? **I'd** screen it.

Sting **rays** hurt!

If it hurts, **yell 'ow'**!

Taking the first letter of each letter yields the message **BIG TECHNOLOGY**. If you type that into the submission form, you get instructions to go to a conference room.

When you walked into the room, you were greeted by an Xbox with a Kinect attached. On the screen, on either side of a black window, there were two 2x3 arrays of dots presented. When you walk forward sufficiently to become noticed (tracked) by the Kinect, your skeleton is displayed in the black window, with six colored joints (shoulders, elbows, and hands). With two players tracked, there are two skeletons shown, each with a differently colored set of joints.

The first step to solving this puzzle is to notice that, by moving your arms around, you can cause your joints to obscure each other - and when that happens, the joints combine their colors. The puzzle should lead you through discovering the following properties of color addition:

- Joints are colored in one of eight colors: white, red, orange, yellow, green, blue, violet, black.

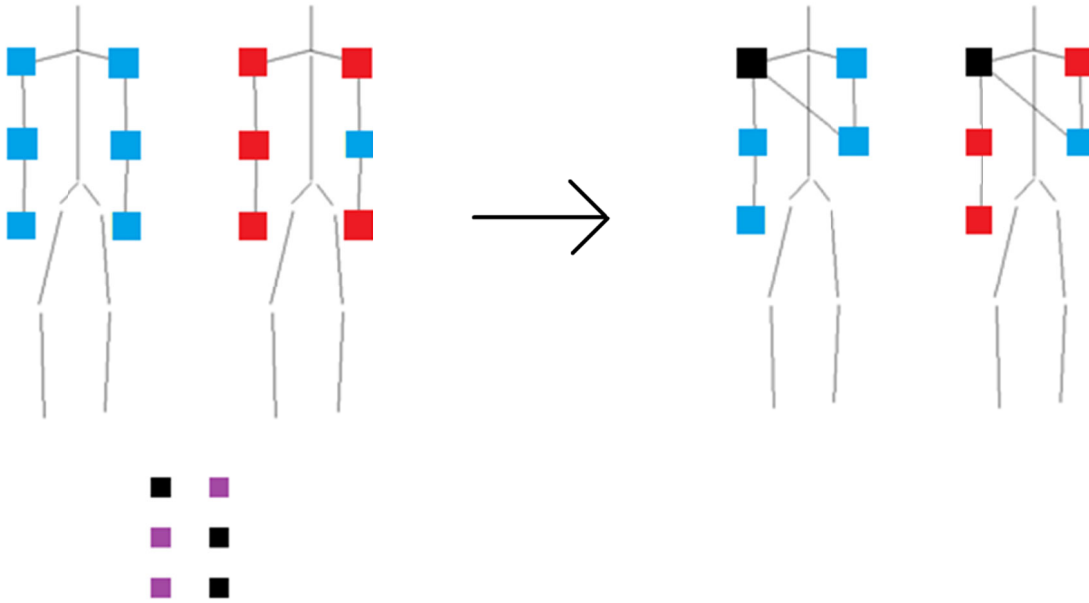
- These colors are created by mixing exactly (0 or 1) of each of (red, yellow, blue). So, for instance, green consists of yellow + blue; orange consists of yellow + red; white consists of yellow + red + blue.
- If two of the same color mix (i.e. red + red), they cancel; you get black as a result.
- Color addition is transitive and cumulative. So, for instance: orange + green = (red + yellow) + (blue + yellow) = (red + blue) + (yellow + yellow) = (violet + black) = violet.

When both players' joints match the appropriate target displays on the sides of the screen, the joints blink, then a new set of colors is displayed.

With this knowledge you should be able to work your way through the first five screens, before being presented with a screen where both players have all six joints white, and no target presented on the sides. Notice that the target arrays were 2x3, which should suggest Braille. The first five targets on the left read (in order) CLASP, while the targets on the right read HANDS. Moving on from here simply requires that the players clasp hands (the left player's right hand with the right player's left hand).

At this point, the target data changes; instead of having two targets, one to each side, you now have one joint target at the bottom of the screen. This should suggest that you need to combine forces. The drawback is that you can't actually see the combination; each player needs to set their own joint positions and colors such that the sum of both players' joints matches the target.

As an example, consider the first puzzle of this phase, and its solution:



The left shoulders (and right hand positions, being empty) are both black, and yield black; the right shoulder, left elbow, and left hand are blue on the left player, red on the right, which yields violet for those positions; and the right elbows are both blue, which cancel, also yielding black.

Once you solve all of these puzzles, you are presented with a final screen:



These are the letters you've been creating through the final set of puzzles. Reordering them by color, you get [MIX SKITTLES]. Skittles candy has five colors (red, orange, yellow, green, and violet). Recursing the mechanic one last time:

- (red + orange + yellow + green + violet)
- (red + (red + yellow) + yellow + (yellow + blue) + (blue + red))
- ((red + red) + (yellow + yellow) + yellow + (blue + blue) + red)
- (black + black + yellow + black + red) = yellow + red = ORANGE

And, finally, ORANGE JELLY is MARMALADE.