

Instructions for Making Green Paint

Step 1: Explore the Proportion Playground

1. Click on the Proportion Playground [link](#) on the class website.
2. Play with the sim for 5 minutes.
3. **Pair/Share:** After 5 minutes of exploration, take turns showing your partner what you discovered about this simulation.



STOP HERE. WAIT FOR THE WHOLE CLASS DISCUSSION.

Step 2: Making the “Greenest” Paint

4. Choose the “Predict” screen.



5. Then, choose the paint scene.



6. Move the slider at the bottom to make two pairs of counters.



7. Try to make the “greenest” paint by selecting blue and yellow paint units. Use the blue eye to check your mixes.
8. When you are ready:

- **Pair/Share:** After about 3 minutes, talk with a partner about what you discovered.
- **Answer Question #1**
- Look for more ways to make the greenest paint

Step 3: Which is More Green?

9. Stay in the “Predict” level.



***NOTE:** Don't press the yellow eye until you are told to do so!*

10. Enter these numbers in your counters.

- **Answer Question #2**
- **Answer Question #3**



11. **NOW PRESS**  the to see what happens.

- **Pair/Share:** Talk to your partner about what you predicted and explain what happened.



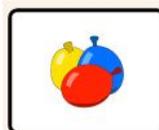
STOP HERE. WAIT FOR THE WHOLE CLASS DISCUSSION.

Step 4: Making the Same Color

14. Change level! Choose the “Explore” screen.



15. Then, choose the paint scene.



16. Move the slider at the bottom to make two pairs of counters.

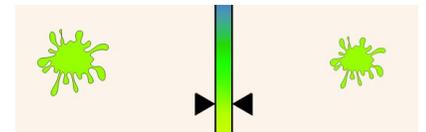


17. On the left side, use the blue and yellow counters to make your favorite color.

➤ **Answer Question #4**

18. Use the counters *on the right side* to match your favorite color by using DIFFERENT numbers of blue and yellow units.

Note: *You know your colors are the same when both arrows turn black.*



19. Look at the numbers in the counters.

➤ Tell your partner some patterns you notice between the pairs of numbers.

➤ **Answer Question #5**

Step 5: Making the Same Color with New Numbers

20. Keep the numbers on one side the same and change the numbers on the other side to make a DIFFERENT pair of numbers that also make your favorite color.

21. **Answer Questions #6 and #7.**

22. Now, use the simulation to check if your 4th pair of numbers also makes you favorite color.

➤ **Answer Question #8**

23. Get ready for a whole class summary discussion.