

Zara's Color Wheel Challenge: The Science of Hues

Learning objective: To understand and apply the principles of color theory, including primary, secondary, and complementary colors.

Join Zara the zebra in her studio! She sees patterns and colors everywhere. Use your knowledge of color theory to complete the tasks below. You will be identifying how colors are mixed and how they interact to create vibrant, balanced artwork. Think carefully about the relationship between colors on the wheel.

Word bank: Primary · Secondary · Complementary · Hue · Mixing · Contrast · Warm · Cool

1. Zara mixes equal parts of blue and yellow paint. What color does she create, and why is this classified as a secondary color? (2 marks)

2. Explain why artists often place 'complementary' colors (such as blue and orange) next to each other on a canvas. What effect does this have on the viewer's eye? (2 marks)

3. If you wanted to change a bright red to a more muted, darker shade without using black, which color from the opposite side of the color wheel might you add to neutralise it? Justify your choice. (2 marks)

4. Compare and contrast 'warm' colors and 'cool' colors. Give an example of an emotion or atmosphere each group might represent in a painting. (2 marks)

5. What might happen if you mixed all three primary colors together in equal amounts? Describe the result. (1 mark)

6. Zara is painting a sunset using only warm colors. List three colors she should select and explain why these belong in the 'warm' category. (2 marks)

Draw: Create a Color Wheel in the shape of a flower with six petals. In the center, draw Zara. Label the three primary petals (Red, Blue, Yellow) and the three secondary petals (Green, Orange, Purple) correctly based on their position between the primary colors.



Extension challenge: Design a 'Complementary Contrast' poster. Choose one pair of complementary colors and create an abstract geometric pattern using only those two hues plus white for highlights. Write a short paragraph justifying how your choice of colors creates visual energy and balance.