

Zara's Colour Wheel Challenge: The Science of Hues

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

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

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

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

2. Explain why artists often place 'complementary' colours (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 colour from the opposite side of the colour wheel might you add to neutralise it? Justify your choice. (2 marks)

4. Compare and contrast 'warm' colours and 'cool' colours. 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 colours together in equal amounts? Describe the result. (1 mark)

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

Draw: Create a Colour Wheel in the shape of a flower with six petals. In the centre, 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 colours.



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