

# HOW MANY SQUARES?

**GRADE:** K-12

**TIME:** One 25-minute session

Challenging students to look closely at the world by slowing down their observation is a crucial step in the development of critical thinking skills. In this short, introductory lesson, students of all grade levels use Wright's art glass window designs as a starting point for learning to notice and engage with all details presented to them. A seemingly easy prompt, "How many squares do you see?" becomes more complex as students learn how slowing down their observations can lead to greater understanding.

**INTEGRATED SUBJECTS:** Visual Arts

## OBJECTIVES

### MATERIALS | RESOURCES

Image of Frank Lloyd Wright's skylight design (one panel) at Unity Temple  
Image of coffered ceiling at Unity Temple  
Pencils  
Paper and/or tracing paper

1. Develop critical thinking skills by observing images for understanding.
2. Appreciate the varying perspectives that appear in the classroom and in the world.
3. Understand how engaging in uncertainty can build critical thinking.
4. Learn to slow down an observation and engage with details and nuances that might be missed upon first glance.

## ESSENTIAL QUESTIONS

1. What helps me see and observe more closely?
2. What interrupts my observation of shapes and figures around me?
3. How can I slow down my thinking and observing to make sure I am taking in everything around me?

# LESSON PROCEDURE

## EXPLORE

- Show the students an image of Wright’s skylight (one panel) at Unity Temple, either on a large screen, through an individual link, or printed individually on paper. Image can be found at <https://www.teachingbydesign.org/multimedia/>.
- Ask students to write down how many squares they see. Allow at least 5 minutes for this exercise.

## ENGAGE

- Place students in groups to discuss their answers and settle on one answer to submit.
- Ask each group to assign a group representative to demonstrate how they arrived at their proposed number of squares. This could be done by tracing the squares on tracing paper, outlining the squares with a SMART Board annotation tool, or pointing and counting. (Tip: Start with groups that found the fewest amount of squares!)
- Show students the Unity Temple skylight window in context, with multiple identical panels of art glass in a coffered ceiling. Image can be found at <https://www.teachingbydesign.org/multimedia/>. Challenge students to repeat the exercise of counting and identifying how many squares they see.

## CRITIQUE & INTERPRET

- **Ask:** Why do so many different answers appear in what might be considered a direct observation question? Is there a right answer? Do you feel confident that you have identified the correct number of squares? Why or why not?
- **Encourage students to reflect in writing on their own strategies for observation and how they might improve their observation skills.**
- **Have students consider what other content areas require careful observation and why slowing down observation could be important.**
  - Optional Extension: Repeat this activity with more complex Frank Lloyd Wright-designed windows with more varied shapes, such as the Robie House windows or Coonley Playhouse windows. Images can be found at <https://www.teachingbydesign.org/multimedia/>.