



project.org

TEACHER LESSON PLAN

Brain Detective

Looking Closer at What We See · Grades 1–2 · 25 minutes · General / Homeroom

Students learn that their brains make predictions about what they see, and will practice the skill of checking their assumptions before deciding.

THE 25 MINUTES

5 min
HOOK

12 min
EXPLORATION

6 min
APPLICATION

2 min
CLOSING

LEARNING OBJECTIVE

Students will learn that their brains make predictions about what they see, and will practice the skill of checking their assumptions before deciding.

MATERIALS NEEDED

- Paper with scrambled sentence: “I cna raed tihs eeavn wehn its msedes up”
- Two pictures that look similar but have small differences
- Chart paper and markers
- **Mini Museum Perception Lab:** minimuseumproject.org/exhibitions/seeing-is-deceiving/illusions
- **Recommended from Perception Lab:** Rubin’s Vase (#4 — faces or vase?), Balcony (#3 — bistable figure)

HOOK · 5 MINUTES

Can you read this?

Write the scrambled sentence on the board:

“I cna raed tihs eeavn wehn its msedes up”

“Can you read this even though the letters are mixed up? Raise your hand if you could read it!” (Most students will be able to.)

“How did you do that? Your brain is so smart that it predicts what words should be there. It knows what makes sense, so it fills in the blanks. But sometimes our brains predict wrong things too!”

EXPLORATION · 12 MINUTES

Be a Brain Detective

ACTIVITY 1 · PICTURE DETECTIVE · 6 MINUTES

- Show the old woman/young woman illusion (or vase/faces): “What do you see?”
- Let students share their first impressions
- Guide them to see the alternate interpretation: “Can anyone see it a different way?”
- “Your eyes are looking at the same picture, but your brain can see it two different ways! This is called an optical illusion.”

ACTIVITY 2 · SPOT THE DIFFERENCE · 6 MINUTES

- Show two similar pictures with subtle differences
- *“At first glance, do these look the same or different?”* (Most will say same)
- *“Now let’s be Brain Detectives and look closer...”*
- Students identify differences
- *“See? Sometimes we need to look closer before we decide what we’re seeing!”*

APPLICATION · 6 MINUTES

Creating our class rules

“Let’s think about real life. Has anyone ever thought someone took their pencil, but it was actually just in their desk? Or thought a friend was ignoring them, but they just didn’t hear?”

Create a class chart on chart paper: **“Before I Decide, I Will...”**

- Look closer
- Ask questions
- Check if I have all the information
- Remember my brain might be making a prediction

Let students contribute their own ideas. Hang the chart in the classroom as a reminder.

CLOSING · 2 MINUTES

“This week, be a Brain Detective! When you think you know what you’re seeing, pause and look closer first. Sometimes our brains make guesses that aren’t quite right.”

MINI MUSEUM CONNECTION

Option 1 — Visit: Students use a stereoscope that makes flat pictures look 3D, and see cards that change when you move them—fun tricks just like today’s optical illusions!

Option 2 — Virtual: minimuseumproject.org/exhibitions/seeing-is-deceiving

ASSESSMENT

Exit ticket: *“Draw or write about one time this week when you’ll be a Brain Detective and check before deciding.”*

DIFFERENTIATED STUDENT HANDOUTS

Three levels of student handouts are provided as separate files. Students self-select their challenge level:

GREEN LEVEL MORE SUPPORT

“More Support” — Simple introduction to brain predictions, circling activity, drawing prompt

YELLOW LEVEL GRADE LEVEL

“Ready for a Challenge” — Write own scrambled sentence, fill-in-the-blank Brain Detective rules

RED LEVEL GO DEEPER

“Go Deeper” — Create own brain trick, real-life story writing, challenge questions

REAL-LIFE EXAMPLES FOR YOUNG STUDENTS

Use these relatable scenarios to help students understand when to “check before deciding”:

- “I thought my friend took my crayon, but it was in my desk the whole time.”
- “I thought Mom was mad at me, but she was just tired.”
- “I thought the dog ate my homework, but I left it at school.”