

Mistake Analysis (What would Joe Schmo Do?)

What is it?

In this mistake analysis strategy, thinkers are introduced to the fictional character “Joe Schmo.” Joe is the guy who falls for every trick. Thinkers look at a test question and ask themselves, “What mistake will Joe Schmo make when he tries to answer this question?”

Why should you use one?

- Thinkers are considering the most common mistakes that an individual might make when answering the question. Practicing this skill teaches thinkers to pause and consider mistakes that might be easy to make within a multiple-choice question.
- In this strategy, we ask thinkers to make reasonable prediction and inferences.
- Using a fictional character allows thinkers to step back and speculate about how someone else might miss the response. This approach is more comfortable than thinking about how they might miss the answer.

Examples of premade thinkLaw Lessons

Mistake analysis is not used in premade thinkLaw curriculum. This strategy is one we show educators in test prep workshops.

Strategy Instructional Video

<https://youtu.be/0qZlspk1Ys>

How to Write a Joe Schmo Mistake Analysis

STEP ONE

Select a multiple-choice question from your curriculum or from your state test that is specific to your grade level and subject area. Even if your thinkers are older, the first time you try this strategy you may want to use a third-grade question to introduce the thinking exercise.

Identify the correct response. Thinkers will be analyzing the incorrect choices.

What Would Joe Schmo Do?



This is Joe.

Joe is often confused.

Joe ALWAYS gets tricked by multiple choice questions.

Look at the multiple-choice questions below. The correct answer is circled. But Joe is not going to pick the correct answer.

Why will Joe miss these questions? What mistakes will he make?

Read the sentence from the passage.

All these leaves drink in summer sunshine and make sugar.

Which statement **best** describes what this sentence means?

- a. Leaves grow larger in the summer.
- b. Leaves use sunlight to make sugar.
- c. Summer is the best time to collect sugar.
- d. Trees with many leaves make more sugar.

STEP TWO

Thinkers will go through each incorrect response and explain why that choice might trick Joe. You may want to complete the first

example as a whole-class activity and then have thinkers do the second example individually or with a partner.

Why would Joe pick answer a?

Leaves do grow larger in the summer. Joe might read this sentence and pick it because it's a true statement. The problem is that it doesn't relate to the sentence.

Why would Joe pick answer b?

Joe might pick this sentence because leaves drink the summer sunshine and make sugar, so it would make sense that summer is the best time to collect sugar.

Why would Joe pick answer c?

Logically, this makes sense. If leaves make sugar, a tree with a lot of leaves would make a lot of sugar. But this sentence doesn't specifically explain the sample sentence.

Probing Questions:

- Why do you think test makers use multiple-choice questions? How do they trick students?
- What strategies do you use when you see a multiple-choice question?
- Do you read all the answer choices when you take a multiple-choice test? Why or why not?


STEP THREE

Thinkers can take the process to the next level and write their own multiple-choice question with the intent of tricking Joe.

1. Solve the problem or answer the question and include the correct answer in your response choices.
2. Think about what small mistakes would make a response incorrect and then write three incorrect responses for your multiple-choice question.
3. Explain why your “trick” answers would fool Joe Schmo.

Look at the time on the clock.

Select the time, to the nearest minute, shown on the clock.



a.	7:42	<i>Why would this choice trick Joe?</i> The hour hand is close to 7. If Joe is rushing, he might think it's on 7, and if 7 is the first choice, he will pick it.
b.	8:33	<i>Why would this choice trick Joe?</i> This would be the answer if the hour and minute hand were switched. This is a common mistake.
c.	9:33	<i>Why would this choice trick Joe?</i> Joe would have switched the hour and minute hand. The minute hand is not on the 9, but it is close to the 9.
d.	6:42	<i>Why would this choice trick Joe?</i> This is the correct answer.

STEP FOUR

Reflection is an important part of this process.

Probing Questions:

- What surprised you most when you started to really think about multiple choice questions?
- In the past, have you made any “Joe Schmo” mistakes when testing? What mistakes did you make? How can you make sure that you don't continue to make these mistakes?
- How will you change your approach to multiple-choice questions after this analysis?

Template: What Would Joe Schmo Do?

This is Joe.



Joe is often confused.

Joe **ALWAYS** gets tricked by multiple choice questions.

Look at the multiple-choice questions below. The correct answer is circled. But Joe is not going to pick the correct answer.

Why will Joe miss these questions? What mistakes will he make?

Insert multiple choice question here.

Why would Joe pick answer ?

Why would Joe pick answer ?

Why would Joe pick answer ?

Insert multiple choice question here.

Why would Joe pick answer ?

Why would Joe pick answer ?

Why would Joe pick answer ?

You Try...

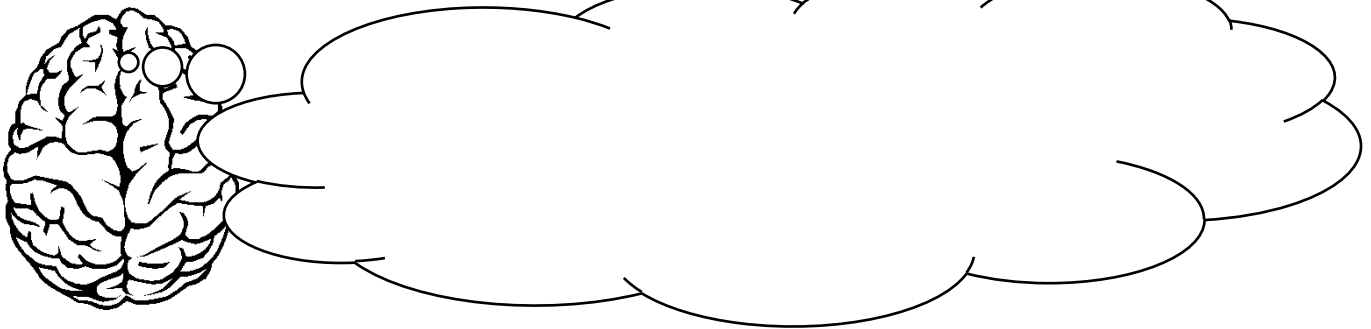
Now it's your turn to figure out how to trick Joe Schmo by writing your own multiple-choice questions. Look at the following questions.

1. Solve the problem or answer the question and include the correct answer in your response choices.
2. Think about what small mistakes would make a response incorrect and then write three incorrect responses for your multiple-choice question.
3. Explain why your "trick" answers would fool Joe Schmo.



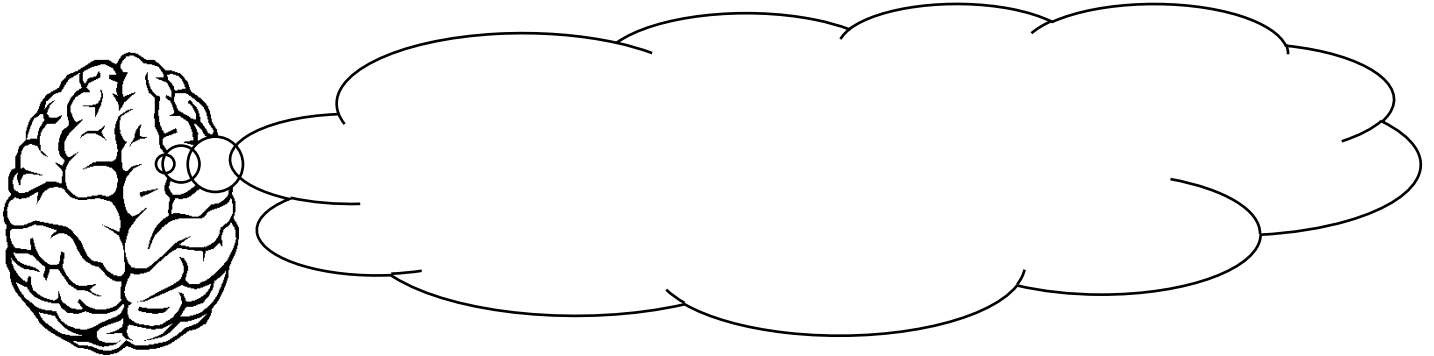
a.		Why would this choice trick Joe?
b.		Why would this choice trick Joe?
c.		Why would this choice trick Joe?
d.		Why would this choice trick Joe?

How does this process help you become a better test taker?



a.		Why would this choice trick Joe?
b.		Why would this choice trick Joe?
c.		Why would this choice trick Joe?
d.		Why would this choice trick Joe?

How does this process help you become a better test taker?



Examples:

Science Example

Which statement best describes evidence that a chemical reaction occurs as a cake bakes?

- F. The water in the cake batter evaporates.
- G. The cake rises as gas bubbles form in the baking cake.
- H. The cake takes the shape of the container in which it is baked.
- J. The water in the cake batter is used to keep the cake moist as it bakes.



What mistake is Joe Schmo going to make?



What you'll need:

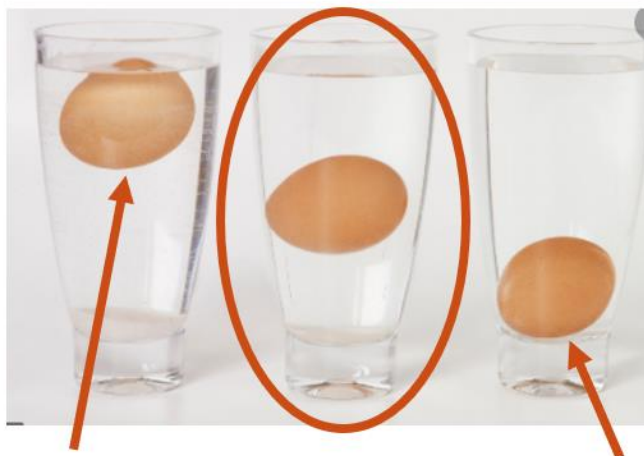
- One egg
- Water
- Salt
- A tall drinking glass

Instructions:

1. Pour water into the glass until it is about half full.
2. Stir in lots of salt (about 6 tablespoons).
3. Carefully pour in plain water until the glass is nearly full (be careful to not disturb or mix the salty water with the plain water).
4. Gently lower the egg into the water and watch what happens.

What did Joe Schmo do to have this result?

What mistake is Joe Schmo going to make?



What happened to experiment 1?

Correct

What happened to experiment 3?

If we believe that education ought to transform opportunities for children by breaking cycles of poverty, we must also believe that doing well on exams matters. Lawyers must take the LSAT and pass the bar. Doctors must take the MCAT, the USMLE, and Board exams. Engineers, nurses, and numerous other professions still use tests as barriers for access. Tests are a part of licensure. We cannot allow tests to be a barrier.

Plumbing Test

3. Which of the following is suitable for testing a DWV system for leaks?

- a. Air
- b. Water
- c. Smoke
- d. All of the above

It is common for modern DWV systems to be tested with air. In the old days water was the most common means of testing. When there is a leak that cannot be found easily, smoke can be used to expose the leak location. Smoke is not used as a primary test method. Air is the test medium of choice. The testing of a DWV system is to be conducted for a minimum of 15 minutes. The minimum test pressure is required to be 10 pounds per square inch (PSI). If only underground plumbing is being tested there must be one riser that is at least ten feet above the main plumbing system.

What if the question asked which option was MOST suitable?

How is the test maker trying to trick Joe?



What mistake is Joe Schmo going to make?

5. What is the likely height of a handicap toilet?

- a. 13 inches
- b. 15 inches
- c. 18 inches
- d. 22 inches

What's tricky about the word "likely"?

My Plan for “What would Joe Schmo Do?” Mistake Analysis

Pull multiple choice questions from your unit assessments or state test. Look for multiple choice questions you think your thinkers may miss.

Multiple Choice Question	Why is this a good question to analyze?