

Evaluation Prompt (for all lessons)

You are an expert tutor reviewer. The data you are given are limited by the following:

1. They are not diarized, you will infer who is speaking based on the text itself.
2. Lack of the problem the student is working on. The evidence for the student's action might be from the reaction of the tutor afterwards.

Analyze the tutoring audio transcripts below and score the tutor on the following 6 binary (0 or 1) dimensions.

For each dimension, return both a binary score (0 or 1) and a short piece of evidence from the transcript under that dimension name.

RUBRIC DIMENSIONS (Return 0 or 1 for each)

1. Reacting_to_errors:

- 0 = The student made a mistake and the tutor either gave the answer OR pointed out the error directly
- 1 = The tutor responded to a math error by asking the student to explain their thinking OR prompting them to think again
- 0 = No evidence of a student making a math error

2. giving_praise

- 1 = The tutor praises the student for their effort during the problem (e.g. "good job. Now, what about this one?", "I like how you kept working on that question")
- 0 = The tutor does not praise the student

3. determining_what_students_know

- 1 = The tutor asks open-ended questions to check what the student already knows on a problem (e.g., "How would you start?")
- 0 = No attempt to check prior knowledge

4. affirming_correct_attempt

- 1 = The tutor affirms a correct response or student's correct reasoning (e.g., "Yes, that's right!")
- 0 = The tutor does not respond to a correct answer or a correct attempt at an explanation of the student's reasoning

5. asking_guiding_questions

- 1 = The tutor asks guiding questions (e.g., "What's the next step?", "What are we trying to solve?")
- 0 = The tutor only gives instructions or answers without asking questions

6. prompting_to_explain

- 1 = The tutor prompts the student to explain their thinking (e.g., "Can you explain how you got that answer?", "Do you want to talk through what you're thinking?")
- 0 = No prompt to explain thinking

Return your output STRICTLY in this JSON format:

```
```json
{{

 "reacting_to_errors": 0,
 "reacting_to_errors_evidence": "No evidence of a student making a math error",
 "giving_praise": 1,
 "giving_praise_evidence": "[03:00]: 'Nice job!'",
 "determining_what_students_know": 0,
 "determining_what_students_know_evidence": "No open-ended question to assess prior knowledge.",
 "affirming_correct_attempt": 1,
 "affirming_correct_attempt_evidence": "[05:01]: 'Yes, that's exactly right.'",
 "asking_guiding_questions": 1,
 "asking_guiding_questions_evidence": "[06:12]: 'What should we do first here?'",
 "prompting_explanation": 0,
 "prompting_explanation_evidence": "No evidence the tutor asked the student to explain their thinking."

}}}
```

## REACT\_ERRORS Opportunity Prompt

You are an expert tutor reviewer.

Your task is to determine whether the following tutoring transcript contains a clear OPPORTUNITY for a tutor to REACT TO A STUDENT'S MATH ERROR.

---

An OPPORTUNITY TO REACT TO A STUDENT'S MATH ERROR exists when:

- A student makes a mistake while solving a math problem (ex: The student incorrectly solves  $118 + 18 = 126$ )

Scoring rules:

- 1: There was an opportunity for a tutor to react to a student's math error
- 0: There was no opportunity for a tutor to react to a student's math error

If the student and the tutor did not work on any math problems then there was no opportunity.

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Constraints:

- The transcript is not diarized. You'll need to infer who is speaking based on the text itself.
- Focus only on students making math errors, not whether the tutor reacted effectively or ineffectively.

---

Format your output in valid JSON using this format ONLY:

```
```json
{{ "had_opportunity_to_react_to_errors": 1,
  "evidence": "at [00:09], The student made a conceptual error, defining 'mean' as
'The one that comes up the most.'"
}}
```

Audio transcript:

```
\\"\\\"\\"
{transcript_text}
```

\\"\\\"\\\"
\"\"\"

GIVE_PRAISE Opportunity Prompt

You are an expert tutor reviewer.

Your task is to determine whether the following tutoring transcript contains a clear OPPORTUNITY for a tutor to PRAISE A STUDENT FOR THEIR EFFORT.

An OPPORTUNITY exists when:

- A student demonstrates perseverance doing the math problem

AN EXAMPLE OF PERSEVERANCE:

- A student making a math mistake and then self-correcting
- A student struggling to understand the problem, getting the answer wrong the first try and eventually getting the problem correct after trying several different approaches
- A student showing they need to get the answer themselves (eg: "It's just that i need to do it myself first")

In this case, a tutor could respond by praising their effort, using phrases like:

- > "You're doing great."
- > "Well, well done, Clara. You're doing amazing"

Scoring rules:

- 1: There was an opportunity for a tutor to praise a student's effort
- 0: There was no opportunity for a tutor to praise a student's effort

If the student and the tutor did not work on any math problems then there was no opportunity.

Constraints:

- The transcript is not diarized. You'll need to infer who is speaking based on the text itself.
- Focus only on praise-giving opportunities, not whether the tutor took it or not.

Format your output in valid JSON using this format ONLY:

```
```json
{{{
 "had_opportunity_to_praise": 0,
 "evidence": "The student and the tutor did not work on a math problem. no
opportunity for a tutor to praise a student"
}}}
Audio transcript:
\"\"\""
{transcript_text}
\"\"\""
"""
```

## DETERMINE\_KNOW Opportunity Prompt

You are an expert tutor reviewer.

Your task is to determine whether the following tutoring transcript contains a clear OPPORTUNITY for a tutor to DETERMINE WHAT A STUDENT ALREADY KNOWS.

---

An OPPORTUNITY exists when:

- A student explicitly asks for help with a math problem

In this case, a tutor could try to find out what the student already knows before helping them out by asking them questions like:

- > "Tell me how you want to begin, Cindy. What do you know about the triangle?"
- > "Do you know how the diameter and the radius are related in a circle?"

Scoring rules:

- 1: There was an opportunity for a tutor to determine what a student already knows
- 0: There was no opportunity for a tutor to determine what a student already knows

If the student and the tutor did not work on any math problems then there was no opportunity.

If the student did not ask for help then there was no opportunity.

---

Constraints:

- The transcript is not diarized. You'll need to infer who is speaking based on the text itself.
- Focus only on determining-knowledge opportunities, not whether the tutor took it or not.

---

Format your output in valid JSON using this format ONLY:

```
```json
{{ "had_opportunity_for_determine_know": 0,
  "evidence": "The student does not make any attempt at a math problem, so there
is no correct response for the tutor to affirm"
}}
```

```
Audio transcript:  
\"\"\"  
{transcript_text}  
\"\"\"  
""
```

AFFIRM_CORRECT Opportunity Prompt

You are an expert tutor reviewer.

Your task is to determine whether the following tutoring transcript contains a clear OPPORTUNITY for a tutor to AFFIRM A STUDENT'S CORRECT ATTEMPT.

An OPPORTUNITY exists when:

- A student provides a correct answer
- A student explains their approach correctly

In this case, a tutor could respond by affirming to the student that their answer is correct, using phrases like:

- > "Yeah, that's correct."
- > "Yep, exactly."

Scoring rules:

- 1: There was an opportunity for a tutor to affirm a student's correct attempt
- 0: There was no opportunity for a tutor to affirm a student's correct attempt

If the student and the tutor did not work on any math problems then there was no opportunity.

Constraints:

- The transcript is not diarized. You'll need to infer who is speaking based on the text itself.
- Focus only on affirmation opportunities, not whether the tutor took it or not.

Format your output in valid JSON using this format ONLY:

```
```json
{{ "had_opportunity_for_affirming_correct_attempt": 0,
 "evidence": "The student does not make any attempt at a math problem, so there
is no correct response for the tutor to affirm"
}}
Audio transcript:
```

```
\\"\\\"\\"
{transcript_text}
\\\"\\\"\\"
"""

```

## GUIDE\_THINKING Opportunity Prompt

You are an expert tutor reviewer.

Your task is to determine whether the following tutoring transcript contains a clear OPPORTUNITY for a tutor to ASK A STUDENT A MATH-RELATED GUIDING QUESTION.

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An OPPORTUNITY exists when:

- Student is passive or shallowly processing
- Student got their approach or answer wrong
- Student asks for help with the math problem

In this case, a tutor could respond by asking the student guiding questions, using phrases like:

> "So when they're kind of in the same position like that, which definition does it fall under?"

> "And if you add a negative of that number with a positive of that number, you end up with what?"

scoring rules:

- 1: There was an opportunity for a tutor to ask a guiding question
- 0: There was no opportunity for a tutor to ask a guiding question

If the student and the tutor did not work on any math problems then there was no opportunity.

---

Constraints:

- The transcript is not diarized. You'll need to infer who is speaking based on the text itself.
- Focus only on guiding question opportunities, not whether the tutor responded.

---

Format your output in valid JSON using this format ONLY:

```
```json
{{  
  "had_opportunity_for.asking_guiding_question": 1,  
  "evidence": "on [05:07]: 'So how can you take the radius and figure out the  
diameter?'"}
```

```
} }  
Audio transcript:  
\\"\\\""  
{transcript_text}  
\\"\\\""
```

PROMPT_EXPLAIN Opportunity Prompt

You are an expert tutor reviewer.

Your task is to determine whether the following tutoring transcript contains a clear OPPORTUNITY for a tutor to PROMPT A STUDENT FOR EXPLANATION.

An OPPORTUNITY TO PROMPT A STUDENT FOR EXPLANATION exists when:

- A student says only the answer without explaining it (ex: It's 24)
- A student solves the problem too quickly or silently
- A student self-corrects their mistake without reflecting (e.g., erases an incorrect answer and writes the right one immediately)
- A student struggles and then guesses the answer (eg: I don't know... maybe 9?)

In this case, a tutor could respond by prompting the student to explain their thinking by saying:

- > "Can you walk me through how you got that?"
- > "Wait, before we move on, what steps did you take?"
- > "Nice fix! Can you explain what changed in your thinking?"
- > "What made you think of 9? Let's talk through it together."

Scoring rules:

- 1: There was an opportunity for a tutor to affirm a student's correct attempt
- 0: There was no opportunity for a tutor to affirm a student's correct attempt

If the student and the tutor did not work on any math problems then there was no opportunity.

Constraints:

- The transcript is not diarized. You'll need to infer who is speaking based on the text itself.
- Focus only on explanation-prompting opportunities, not whether the tutor took it or not.

Format your output in valid JSON using this format ONLY:

```
```json
{{{
 "had_opportunity_to_prompt_for_explanation": 1,
 "evidence": "at [00:09], the student responds with uncertainty by saying 'will
it be multiplication?' "
}}}
```

Audio transcript:

```
\\"\\\"\\"
{transcript_text}
\\\"\\\"\\"
"""
```