

Questions that Promote Learning in the Elementary Math Classroom

Closed Questions

(Use when looking for a single correct answer.)

What is ...?

Can you define ...?

Can you compute ...?

What do you remember about ...?

Can you name _____?

Can you label ...?

What is the main idea of this problem?

Yes/no questions

Either/or questions

Open Questions

(Use when looking for multiple responses.)

Can you give ___ examples of ...?

Can you describe ___ situations where you would ...?

How might you...?

How would you explain _____ to someone who missed class?

What if...?

How did you approach this problem?

Does that approach always work?

Can you tell me what the problem is asking?

How would you state this problem in your own words?

What tools might you use to help you solve this problem?

Who has a different answer? How did you get that answer?

Who has the same answer, but approached the problem differently?

Can you convince me that your approach makes sense?

Can you make a prediction?

Can you write an equation?

Can you show me what you mean?



Questions that Promote Learning in the Elementary Math Classroom

Funneling Questions

(Use when helping students follow your train of thought.)

Have you tried...?

What would happen if ...?

You might want to ...

If I were you, ...

Focusing Questions

(Use when helping students to clarify their own thinking.)

What have you already considered? What else could you consider?

What have you already tried? What other strategies could you try?

Of all these ideas, which one do you want to try first?

How did you begin to think about this problem?

How have you tackled similar problems in the past?

Can you explain how your answer is the same as or different from _____?

How can you restate the problem?

Is that true in all cases?

Where can you begin?

Do you see any patterns or relationships that might help you?

Is there something that can be eliminated?

Recall Questions

(Use when you want students to show you the information they know.)

Can you list the steps for _____?

What do you know so far?

What can be inferred from _____?

Have you seen a problem like this before?

What ideas have you learned that might help you solve this problem?

Can you think of a rule that might help?

Can you break the question into parts?



Questions that Promote Learning in the Elementary Math Classroom

Probing Questions

(Use when you want students to elaborate on their thinking.)

How do you know that?

What makes you think that?

Can you explain the connection between ___ and ___ with more details?

What do you know so far?

What unanswered questions do you have?

What knowledge do you have that is not stated in the problem?

What examples can you provide to prove this?

Are there other ways you could solve this problem?

How would doing _____ change the solution?

Did you notice a pattern here? Can you explain it?

How does this relate to _____?

Does your answer seem reasonable?

What would happen if we changed _____?

What facts support your answer?

Is that the only possible answer?

How can you test your solution?

Process Questions

(Use when you want students to reflect on their process.)

Why did you choose that strategy? What are the pros and cons of that strategy?

What would you do differently next time?

What advice would you give someone trying to solve a problem like this?

Could you elaborate on the steps you used to solve this problem?

What illustrations, diagrams, or other visuals helped you solve this problem?

What tools did you use to help you solve this problem? Why did you select those tools? Which tool was most helpful?

What parts confused you?

Have you considered alternate approaches? What are the pros and cons of those approaches?

What did you try that didn't work?

Is there a more efficient strategy?

What did you do first? What do you need to do next?

