

Math Constructive Conversation Skills Poster

Think Together to Analyze a Problem & Prepare to Solve it



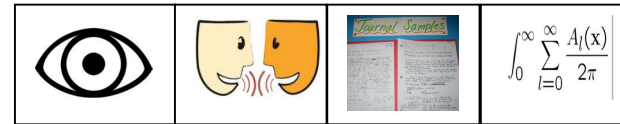
Prompt starters:

What are we trying to do?
 What is the problem asking?
 How does the problem begin? What happens?
 What do we need to know?
 How can we break this down?
 What type of problem is this?
 What patterns do we notice?
 What's our plan for solving it?
 Can you say what you just did?
 What is your estimate for the answer?

Response starters:

In order to ____, we need to ...
 In other words,
 More specifically, it is ... because...
 Let's see, it is similar to the problem that the teacher did because...
 It is important to ____ because
 Let's stay focused on
 Let's get back to the idea of...
 In future problems we will remember to...

Use Multiple Approaches & Representations



Prompt starters:

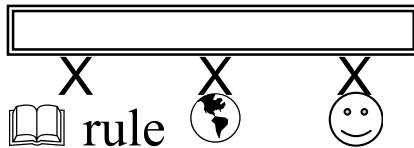
How else can we show this?
 How can we draw this?
 What symbols can we use?
 How can we explain this to others?
 How can we write what we are thinking/doing?
 How can we translate this into math?
 Let's back up and try a different way.
 Which method is most useful? Why?

Response starters:

Maybe we can use...
 Another way to show this is...
 In math symbols we could write...
 We can draw it like this because it says...
 Let's try to... and see what happens.

Problem/Task

Explain & Support Reasoning



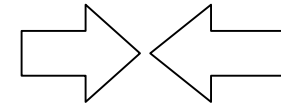
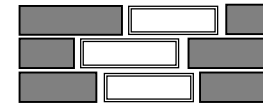
Prompt starters:

Can you explain why you...?
 What does that mean?
 What are you doing?
 What math rule are you using?
 Can you give an example?
 How does the sample problem help us?
 What are examples of this problem from real life?
 Can you clarify where you...?
 How did you get this answer?

Response starters:

If we ____, then we need to ____ because...
 A key mathematical principle is making sure that you...
 In real life this is similar to when you want to...
 An example from my life is
 One case that illustrates this is...
 In math, we always need to...
 Let me show you what I mean.

Connect to, Build on, & Challenge Partner Ideas



Prompt starters:

How can we add to the idea of...
 What do you think about this strategy for solving it?
 What else could support this idea?
 Do you agree?
 What contradicts this? What are other points of view?
 What did we learn from doing this problem? How will it help in life?
 Let's create a similar problem.

Response starters:

That reminds me of...
 I want to add on to your idea of...
 That idea connects to...
 I see it a different way,
 On the other hand, ...
 That makes me think of...
 We can agree that...