

Math Discourse Cards



What Is Math Discourse?

Math discourse simply means talking about math. When students talk about math, they process ideas more critically, develop perseverance, and retain what they learn.

Try using these Discourse Cards when your student is working on math to help get the conversation going!



Tips and Guidance for Using the Math Discourse Cards

- ✓ **Focus most on the mathematical thinking and strategies your student uses**, not just on getting the correct answer.
- ✓ **Help your student by asking curious questions** so they can think through a solution strategy and fix their own mistakes.
- ✓ **Use language that builds a growth mindset.** Praise effort and determination rather than correct answers or being smart. Some examples of what you can say:
"That was a great explanation."
"I can see you've worked hard on this problem."
"I'm really proud that you kept going even when you got stuck."
"The strategy you used was really clever because..."
- ✓ **Ask your student to explain their thinking.** Help your student think through their ideas more fully so you can better understand their thought process by asking them to explain their thinking—especially if you are using a card that asks a yes or no question.
- ✓ **Be patient with yourself and your student, and don't give up.** It may take several tries to really get the conversation going.
- ✓ **Know when your student has had enough.** Frequent but brief sessions may be better than longer ones depending on your student's age and their level of attention.
- ✓ **Always keep it fun and positive.** If your student's interest wanes or they get frustrated, set aside the Discourse Cards and try again another time.

Math Discourse Cards

Use the **green cards** to help your student make sense of a problem and persevere in solving it.



Make Sense of Problems and Persevere1	Make Sense of Problems and Persevere2
<p>Do you agree with the strategy, answer, or explanation? Do you disagree?</p>	<p>Which words in the problem are most important? Why?</p>
Make Sense of Problems and Persevere3	Make Sense of Problems and Persevere4
<p>How would you explain your strategy to others?</p>	<p>How would you explain how to solve this problem to someone who missed class today?</p>

Math Discourse Cards

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Make Sense of Problems and Persevere

5

What is this problem about?
What can **you tell me about it?**

Make Sense of Problems and Persevere

6

Is there **another way** to draw, explain, or say that?

Make Sense of Problems and Persevere

7

What other ideas have you tried?

Make Sense of Problems and Persevere

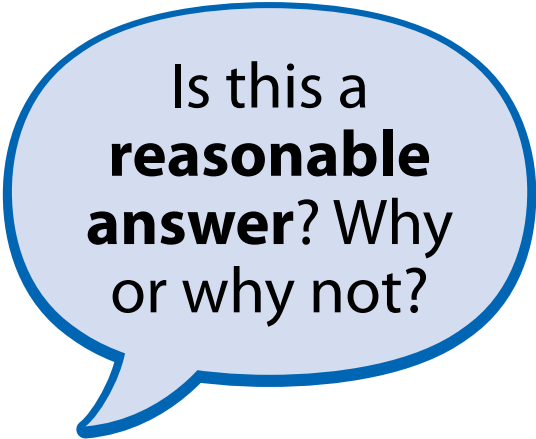
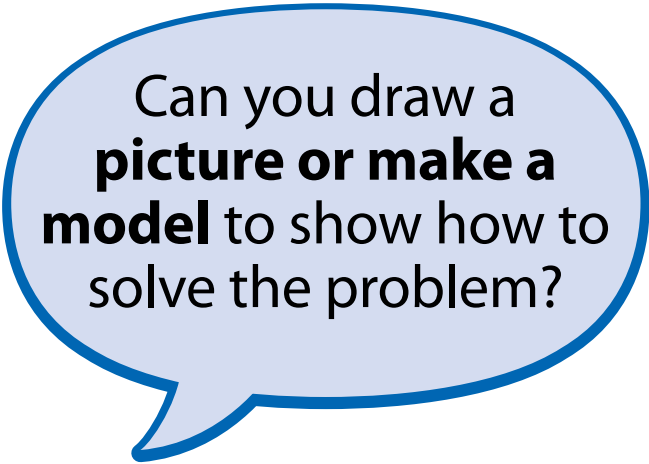
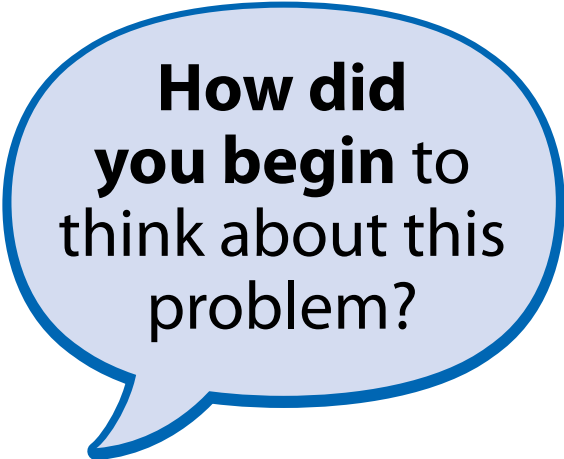
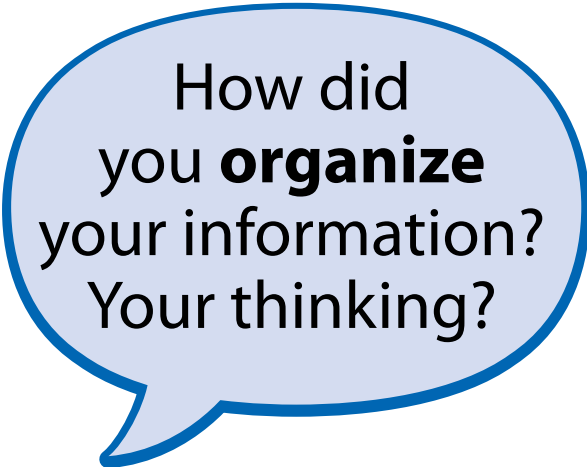
8

Could you **explain** what the problem is asking?

Math Discourse Cards

Use the **blue cards** to help your student explain and/or reason through their thinking.



Reason, Explain, and Critique9	Reason, Explain, and Critique10
 <p>Is this a reasonable answer? Why or why not?</p>	 <p>Can you draw a picture or make a model to show how to solve the problem?</p>
Reason, Explain, and Critique11	Reason, Explain, and Critique12
 <p>How did you begin to think about this problem?</p>	 <p>How did you organize your information? Your thinking?</p>

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Use the **blue cards** to help your student explain and/or reason through their thinking.



<p>Reason, Explain, and Critique 13</p> <p>How would you check your steps or your answer?</p>	<p>Reason, Explain, and Critique 14</p> <p>What did not work?</p>
<p>Reason, Explain, and Critique 15</p> <p>How would your solution look if you used another model?</p>	<p>Reason, Explain, and Critique 16</p> <p>Is there another way to solve the problem?</p>

Math Discourse Cards

Use the **purple cards** to help your student reflect on what they did and make connections to other things they have learned.



<p>Reflect and Connect</p> <p>17</p> <p>Are there any advantages to using one strategy over another?</p>	<p>Reflect and Connect</p> <p>18</p> <p>Did you use any tools to solve this problem? If so, describe them.</p>
<p>Reflect and Connect</p> <p>19</p> <p>Do you see any patterns?</p>	<p>Reflect and Connect</p> <p>20</p> <p>How is this problem like one we solved before? How is it different?</p>

Math Discourse Cards

Use the **purple cards** to help your student reflect on what they did and make connections to other things they have learned.



<p>Reflect and Connect</p> <p>21</p> <p>Is there a real-life situation where this could be used?</p>	<p>Reflect and Connect</p> <p>22</p> <p>What are some things you learned?</p>
<p>Reflect and Connect</p> <p>23</p> <p>What ideas did you use to solve this problem?</p>	<p>Reflect and Connect</p> <p>24</p> <p>What other questions do you have about this topic?</p>

Math Discourse Cards

Use the **red cards** to help your student respond to questions.



Sentence Starters

25

I **started**
solving the
problem by ...

Sentence Starters

26

The strategy
that **makes**
the most sense
to me is ...

Sentence Starters

27

A place
where I **got**
stuck was ...

Sentence Starters

28

I **need help**
understanding ...

Math Discourse Cards

Use the **red cards** to help your student respond to questions.



Sentence Starters

29

Something
new that **I learned**
today was ...

Sentence Starters

30

I noticed
a connection
between ...

Sentence Starters

31

This is
similar to ...

Sentence Starters

32

Something
that is **important**
to remember is ...