

Grades

K-5

Math Discourse Activities

Get Your Student Talking about Math!

Math discourse is an essential part of learning mathematics. By talking about math, students gain deeper understanding, more easily retain what they learn, and develop their “math confidence.”

The [Math Discourse Cards for Families](#) from *i-Ready Classroom Mathematics*, along with these sample activities, were designed to get students asking questions and sharing their math ideas and strategies.

Try using these sample activities to understand how you can encourage mathematical conversations between you and your student. Also, be sure to supply your student with [materials to encourage hands-on exploration](#).

It may take several tries to really get the conversation going, so be patient and persistent, and be sure to reach out to your student’s teacher if you have any questions. Most of all, make it fun!

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

Reason, Explain, and Critique 13

How would you **check your steps** or your answer?

Reflect and Connect

Did you **use any tools** to solve this problem? If so, describe them.

Sentence Starters 31

This is **similar to...**

Set Up

Provide your student with paper and a pencil, as well as [materials for hands-on exploration](#).

Directions

Pose the question:

How many different pairs of numbers can you add together to make 5 using the following number sentence?

$$\underline{\quad} + \underline{\quad} = 5$$

- Allow your student time to explore ways for solving this problem. Be sure to provide tools and materials to help them, such as objects to count like buttons or dried beans, and paper and colored pencils.
- When your student is ready, invite them to share their thinking and describe how they went about solving.
- **Use the Math Discourse Cards below** to support your student in expanding upon their thoughts.
- As you wrap up the activity, provide your student with affirming feedback on their thoughtful responses, their efforts in solving the problem, their persistence, or their positive attitude in learning something new!

Make Sense of Problems and Persevere

8

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

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

Reason, Explain, and Critique

10

Can you draw a **picture or make a model** to show how to solve the problem?

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

Reflect and Connect

19

Do you see any **patterns**?

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

Sentence Starters

25

I started solving the problem by...

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



Explore the full set of [Math Discourse Cards for Families](#).

Set Up

Provide your student with paper and a pencil, as well as [materials for hands-on exploration](#).

Directions

Pose the question:

How many different pairs of numbers can you add together to make 10 using the following number sentence?

$$\underline{\quad} + \underline{\quad} = 10$$

- Allow your student time to explore ways for solving this problem. Be sure to provide tools and materials to help them, such as items to count like buttons or dried beans, and paper and colored pencils.
- When your student is ready, invite them to share their thinking and describe how they went about solving.
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Set Up

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Directions

Pose the problem:

Walsh Elementary is having a blanket drive for the local charity. Mr. Garcia's class has collected 28 blankets, and Mr. Abbott's class has collected 54. How many more blankets does Mr. Abbott's class have?

- Allow your student time to explore ways for solving this problem. Be sure to provide tools and materials to help them, such as objects to count like buttons or dried beans, and paper and colored pencils.
- When your student is ready, invite them to share their thinking and describe how they went about solving.
- **Use the Math Discourse Cards below** to support your student in expanding upon their thoughts.
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Make Sense of Problems and Persevere

5

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

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

Reason, Explain, and Critique

13

How would you **check your steps** or your answer?

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

Reflect and Connect

23

What **ideas** did you use to solve this problem?

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

Sentence Starters

29

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

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



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Set Up

Provide your student with paper and a pencil, as well as [materials for hands-on exploration](#).

Directions

Pose the problem:

Juanita and Brynham each have an orange for snack. Juanita ate $\frac{2}{8}$ of her orange, and Brynham ate $\frac{1}{4}$ of hers. Both oranges are the same size. Did they eat the same amount of orange? How do you know?

- Allow your student time to explore ways for solving this problem. Be sure to provide tools and materials to help them, including paper and colored pencils.
- When your student is ready, invite them to share their thinking and describe how they went about solving.
- **Use the Math Discourse Cards below** to support your student in expanding upon their thoughts.
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Reason, Explain, and Critique

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How would you **check your steps** or your answer?

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

Reflect and Connect

23

What **ideas** did you use to solve this problem?

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

Sentence Starters

30

I noticed **a connection** between...

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



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Set Up

Provide your student with paper and a pencil, as well as [materials for hands-on exploration](#).

Directions

Pose the problem:

Ji is preparing for a party. The local party supplier has 5 party hats. Ji needs 7 times that amount. How many hats does Ji need for her party?

- Allow your student time to explore ways for solving this problem. Be sure to provide tools and materials to help them, including paper and colored pencils.
- When your student is ready, invite them to share their thinking and describe how they went about solving.
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Make Sense of Problems and Persevere

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What can **you tell me about it?**

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

Reason, Explain, and Critique

15

How would your solution look if you used **another model?**

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

Reflect and Connect

21

Is there a **real-life situation** where this could be used?

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

Sentence Starters

25

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



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Set Up

Provide your student with paper and a pencil, as well as [materials for hands-on exploration](#).

Directions

Pose the problem:

Monica, Shaunda, and Mike are decorating 5 floats for the homecoming parade. If they share the work equally, how much will each student decorate?

- Allow your student time to explore ways for solving this problem. Be sure to provide tools and materials to help them, including paper and colored pencils.
- When your student is ready, invite them to share their thinking and describe how they went about solving.
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Make Sense of Problems and Persevere

4

How would **you explain** how to solve this problem to someone who missed class today?

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

Reason, Explain, and Critique

15

How would your solution look if you used **another model**?

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

Reflect and Connect

23

What **ideas** did you use to solve this problem?

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

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