

Summarizer

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| Your job as Summarizer: Describe what the problem is about and what question you are trying to answer. Write down the important information. Tell why you think it is important. Discuss any strategy you might use to solve this problem. | You can start your conversation with..... I think this problem is asking us to figure out.... The question we need to answer is..... The important information we need to use is..... |
| <u>In solving the problem:</u> <ul style="list-style-type: none">• Provide key information to the group as you solve the problem together.• Suggest other strategies or steps to help solve the problem.• Make sure the answer is Reasonable.• Write out the answer in a complete sentence and re-read to the group for final approval. | |

Questioner

Your job as Questioner:

Read the problem to the group.

After the summarizer takes a turn, then you:

Determine what questions to ask about what you read.

Explain what you were thinking about while the problem was read aloud.

Describe a possible strategy and ask your group if that strategy will work.

You can start your conversation with.....

I wonder what it means when the problem said...?

How can we....?

What does it mean by.....?

Could we use ? to start to solve this problem?

? could be a table, chart, picture, equation...

In solving the problem:

- Check all math calculations for accuracy.
- Make sure each group member participates in completing the work.
- Ask questions about each step of your work to make sure everyone understands how to solve the problem.

Clarifier

Your job as Clarifier:

After the Questioner asks the questions, you:

Restate what the problem is about and what question you are trying to answer.

Select the strategy your group will use.

Identify anything else that might be confusing in the problem.

You can start your conversation with.....

The question we need to answer is.....

We are going to start with _____ strategy.

Are there any ideas or pieces of information that need more clarifying for you?

Let's begin and solve this problem!

In solving the problem:

- Set up the problem using the strategy chosen.
- Make sure each group member agrees with the plan.
- Ask for assistance and clarify any confusion as you work through the problem together!

Designer/Artist

Your job as Designer/Artist:

Design, draw or create a representation of the number sentence in the problem.

Choose at least one:

- Draw a diagram on centimeter graph paper or your notebook.
- Use manipulatives and/or blocks to create the physical representation of the division you need.

Check to make sure your representation is accurate and matches the number sentence.

Solve the number sentence using your representation.

You can start your conversation with.....

I think I will draw a picture....

Or

I think I will create a representation out of blocks...

To represent the whole amount, I will use a denominator of 8, 12, or 20 (or some other amount).

I will use a different color to show that I am dividing by....

The amount that each person will share equally is...

Reader/Checker

| Your job as Reader/Checker: | You can start your conversation with..... |
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| First, you read the problem to the group. | The question we need to answer is..... |
| Restate what the problem is about and what you think the question is that you are trying to answer. | Are there any ideas or pieces of information that need more clarifying for you? |
| Help the writer/questioner make sure everyone understands the problem. | I think this number sentence is (not) correct because... |
| Check that the number sentence created matches the information in the problem. | This diagram makes sense to me because... |
| Check the diagram or representation from the Designer/Artist to make sure it represents the problem and the number sentence. | I think these calculations are (not) correct because... |
| Check all math calculations for accuracy. | Do we all agree with.... |
| Make sure everyone in your group agrees with the solution. | Are we ready to go on to the next problem? |
| | The next reader will be... |

Writer/Questioner

Your job as Writer/Questioner:

After the Reader reads the question:

Determine what questions to ask about the problem.

Explain what you were thinking about while the problem was read aloud.

Write a possible number sentence that could represent the problem. Ask your group what they think.

Assist the Designer/Artist with creating a representation to match your number sentence.

Solve your number sentence by showing all work and using accurate calculations.

You can start your conversation with.....

I wonder what it means when the problem said...?

I think this problem is asking....

What does it mean by.....?

Could we use _____ as a number sentence to help represent this problem?

Do you have other ideas?

How will that representation match my number sentence?

I think I have solved this problem using....