ST Math
Summer Immersion

PROBLEM SOLVING JOURNAL WITH DESIGN BOOKLET

This journal belongs to:

_____

Grade 2

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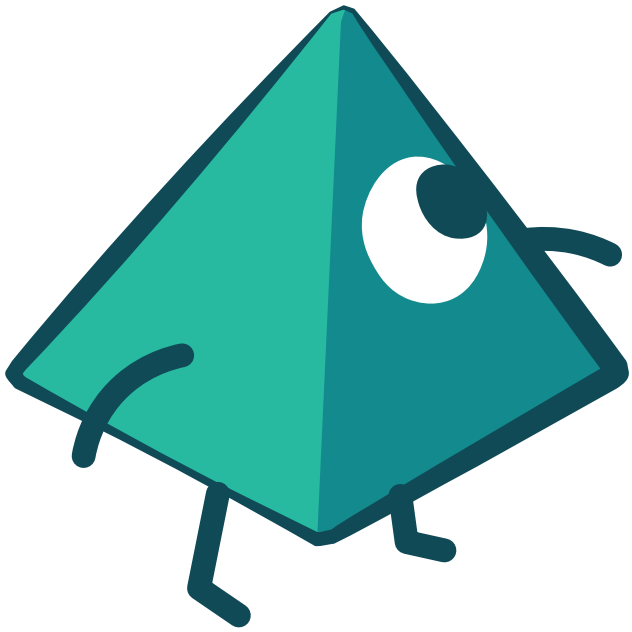

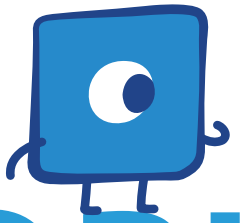

PROBLEM SOLVING JOURNAL

My Thinking Path

TOPIC: _____

Starting my math journey...

What are the things I already know about this topic?

What are some questions I have about this topic?

PROBLEM OF THE DAY | G2_POD_W1_D1

Create a class "Getting to Know Our Class" chart.

PROBLEM OF THE DAY | G2_POD_W1_D2

Describe the class mathematically.

PROBLEM OF THE DAY | G2_POD_W1_D3

Yolanda made 48 cookies for a party. Hector made 33 more. How many cookies do they have altogether?

PROBLEM OF THE DAY | G2_POD_W1_D4

Valerie had 67 beads. She used some to make a necklace and the others she put in a box. How many could she have used for the necklace and how many could she have put in the box? Explain your answer using pictures or words.

My Thinking Path

TOPIC: _____

Reflecting on my math journey...

What new things did I learn? Did this experience make me think of anything differently?

What challenges am I having/questions I still have about this topic?

Exit Ticket

3 math skills I used today:

2 examples of what I learned:

1 strategy I used OR 1 connection I made:

Exit Ticket

1 big idea I learned today was:

today I discovered:

ST Math Puzzle Reflection 1

Game: __ Minutes played __ Puzzles played

Write or draw something you learned today.

Write or draw something that was easy/hard.

This connects to what I learned in class.

ST Math Puzzle Reflection 2

Game: __ Minutes played __ Puzzles played

Describe the math you learned.

Give a math example of the math you learned.

Write math vocabulary words you used.

My Thinking Path

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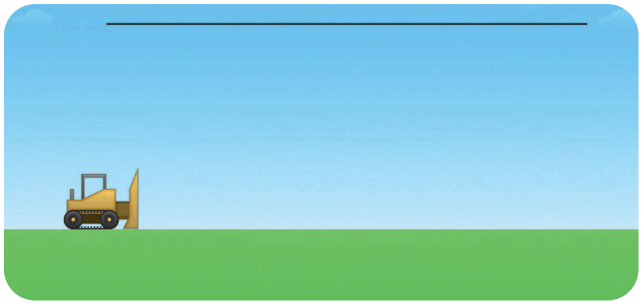
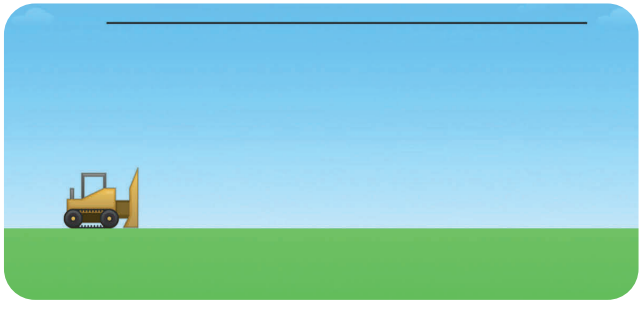
PROBLEM OF THE DAY | G2_POD_W2_D1

Kayla is selling 45 brownies to raise money for a trip. She sold 8 brownies on Monday. On Tuesday, she sold 16 brownies. How many brownies does she have left? Write or draw a picture to show how you got your answer.

PROBLEM OF THE DAY | G2_POD_W2_D2

Create two examples of a new JiJi puzzle Each example must have 2 steps like the puzzles you did earlier and result in an answer of 18. Write your equation on the line. Then compare the two puzzles. How are they alike? How are they different?





PROBLEM OF THE DAY | G2_POD_W2_D3

Devin has some cards in his collection. Joe gave him 16 cards and Mark gave him 27 cards. He has 92 cards total. How many cards did he start with? Use words or pictures to explain how you found your answer.

PROBLEM OF THE DAY | G2_POD_W2_D4

Brittany bought a box of cards. The box had 30 cards inside. Brittany wanted to give a card to all 17 girls on her soccer team. She also wanted to give each of her 6 friends a card. Brittany's mom needs 8 cards for her family. Brittany says there will be enough cards for her mom to use. Is she correct? Write or draw a picture to explain your answer.

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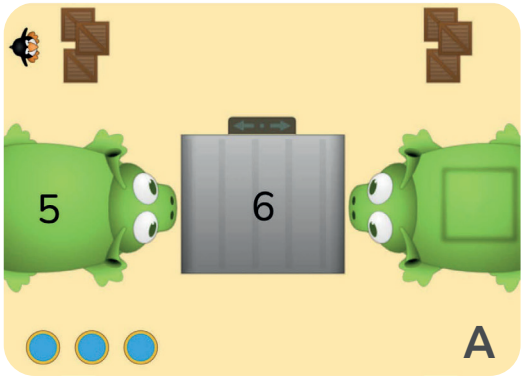
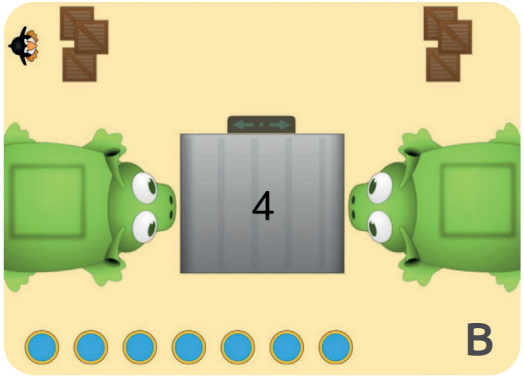
PROBLEM OF THE DAY | G2_POD_W3_D1

You have 15 pieces of gum. You gave some away on Monday and you gave some away on Tuesday. You now have 6. Draw a picture to show a possible solution to this problem. Explain how you found the answer.

PROBLEM OF THE DAY | G2_POD_W3_D2



Fill in the blank square to solve the JiJi puzzle. Explain how you solved the puzzle.



Fill in the blank square to solve the JiJi puzzle. Explain how you solved the puzzle.

PROBLEM OF THE DAY | G2_POD_W3_D3

Lacey had a collection of dolls. Her mom was making shoes for each of her doll's feet. If her mom made 12 shoes, how many dolls does Lacey have?

PROBLEM OF THE DAY | G2_POD_W3_D4

Zach has 18 pencils and 3 pencil boxes. He is putting an equal number of pencils in each box. How many pencils will he put in each box? Write or draw a picture to explain your answer.

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What are some questions I have about this topic?

PROBLEM OF THE DAY | G2_POD_W4_D1

Landon has 5 cars. Timothy has 3 cars. Paul has 7 cars. The boys wanted to each have the same number of cars. In the space, below draw a picture to show how many cars each boy should have.

PROBLEM OF THE DAY | G2_POD_W4_D2

Raven had 4 packs of markers. Each pack had 3 markers. How many markers does Raven have altogether? Draw a picture to show how you found your answer. If she received 2 more packs of markers, how many markers will she have? Draw another picture to show how you found your answer.

PROBLEM OF THE DAY | G2_POD_W4_D3

Mariana was arranging 24 cupcakes on a plate. Draw an array to represent one way Mariana could have arranged the cupcakes. Write an equation using repeated addition to represent your array.

PROBLEM OF THE DAY | G2_POD_W4_D4

Yesterday, Mariana moved 24 cupcakes from the plate onto a tray. She arranged the cupcakes differently. Draw a different array and write an equation to represent your thinking. Compare the two arrays you drew. How are they alike? How are they different?

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PROBLEM OF THE DAY | G2_POD_W5_D1

A garden is pictured below. Using addition, create two equations that represent the garden.

PROBLEM OF THE DAY | G2_POD_W5_D2

A farmer planted 20 stalks of corn in a rectangular field. He had the same number of corn stalks in each row. Draw a picture to show two ways the farmer could have planted the corn. Explain how you came up with your pictures.

My Thinking Path

TOPIC: _____

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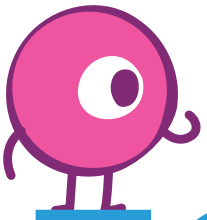


DESIGN CHALLENGE
STUDENT BOOKLET

STEP 1: ASK

PLAY GAMES

Number Kicker

I like this game because

Write or draw the math you learned in this game

STEP 1: ASK

PLAY GAMES

Make Ten Concentration

I like this game because

Write or draw the math you learned in this game

STEP 2: INVESTIGATE

GAMES

My Favorite Game

My favorite game (Put an X next to your favorite game)

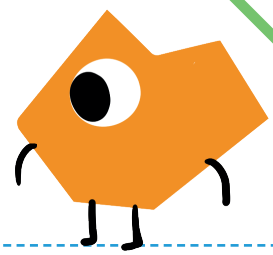
____ Number Kicker

____ Make Ten Concentration

This game is my favorite because

STEP 2: INVESTIGATE

GAMES



A Game Should Have

1

2

3

STEP 3: IMAGINE

MATH CONCEPT

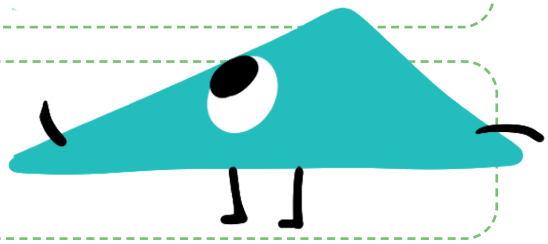
Math Idea

1 **Our concept is**

2 **Write or draw to tell about it**

3 **I think the math concept is**

____ easy ____ hard

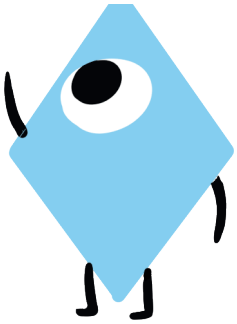


STEP 3: IMAGINE

SHARE

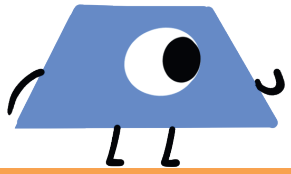
My Ideas

What ideas do you have for your game? Write or draw them below.



STEP 3: IMAGINE

GAME PLAN



Our Game

The name of the game we are making is

We chose this game because

STEP 3: IMAGINE

GAME RULES

Rules

Tell how you play Tic Tac Toe

My new rule is

My new rule made the game (circle one)

STEP 4: PLAN

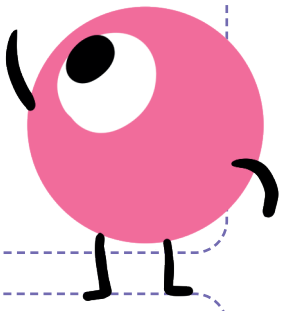
MAKING A DESIGN

Blueprint

1 **Game name**

2 **Number of players**

3 **Things we need to build our game**



4 **People in my group**

STEP 4: PLAN

MAKING A DESIGN

Game Rules

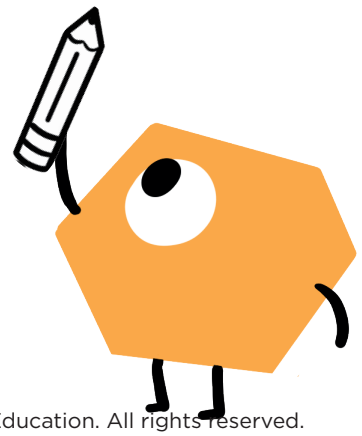
1. **Tell how you play this game**

2. **You win our game by**

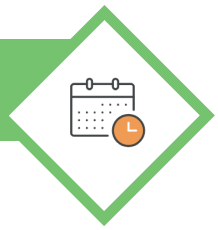
3. **Give an example of the math in your game**

STEP 4: PLAN

DRAW A PICTURE OF YOUR GAME BOARD



STEP 5: CREATE



WORKING TOGETHER

My Job

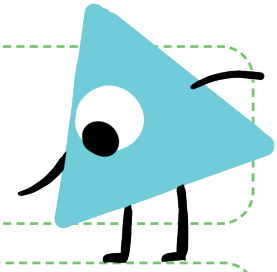
I will help build the game by

Things I need to do my job

STEP 6: TEST

CHECKING THE GAME

WHAT DO OTHERS THINK



1. Were your game rules easy to understand?

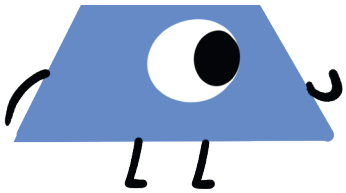
____ yes ____ no

2. Explain why

3. One thing I want to change is

STEP 7: IMPROVE

REFLECTING ON THE GAME



REVIEW GAME

For Game Designers

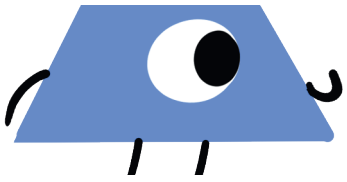
1. **I will improve my game by**

2. **This makes my game better because**

3. **Something I learned testing my game is**

PRESENTING YOUR GAME

DRAW A POSTER ABOUT YOUR GAME.



Design Process

ST Math® Summer Immersion provides students in grades K-5 with an opportunity to accelerate math learning during the summer months. Students experience engaging and fun puzzles, lessons, and projects that focus on grade-level development of content knowledge, reasoning skills, and growth mindset.

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