

Expectations Signatures due Friday.

Pease **keep** the previous pages, and **return** this signed page to Mrs. Mulligan by Friday 9/6.

I have read and understand the 6th Grade Math Concepts Expectations and Procedures.

Student Name _____

(Student signature) Date: _____

(Parent/Guardian signature) Date: _____

(Parent/Guardian preferred phone number)

(Parent/Guardian preferred email)

What?

Who?

How?

Why?

Team Roles

Resource Manager:

- Make sure that the team has tiles or resource pages and scissors.
- Call the teacher over for team questions.
"No one has an idea? Should I ask the teacher?"

Facilitator:

- Start the team's work by reading each problem out loud.
- Keep everyone discussing each part together by asking questions such as,
"How can we tell how many toothpicks there are?"
"How can we change the number of toothpicks without changing the number of tiles?"

Recorder/Reporter:

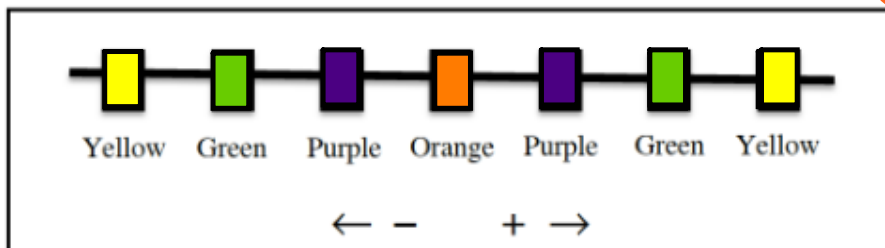
- When your team is called on, share your team's ideas and reasons with the class.
- Help the team agree on an idea: *"Do we agree that this shape fits the clue?"*

Task Manager:

- Make sure no one talks outside your team.
- Help keep your team on task and talking about math.
"OK, let's focus on the question here."
"What is the next shape we need to make?"
- Listen for statements and reasons.
"Can you explain how you see that?"
"Tell us how you know that there are ____ toothpicks."

Color-Rama Purple Class

Orange Teacher



Game Rules

1. Each player chooses one of the colors on the Color-Rama Game board. No two players may choose the same color.
2. Place a marker on the orange square.
3. The players take turns flipping the +/- coin three times to determine how to move the marker. Each time a + comes up, the marker moves one square to the right. Each time a - comes up, the marker moves one square to the left.
4. If the marker lands on your color after the three moves, you win.

1-8. LEARNING MORE ABOUT THE GAME

Do you think one color is a better choice than the others if you want to win? Is there a color that you should not pick? One way to answer these questions is to play the game and keep track of what happens.



Your teacher will give you and a partner a Lesson 1.1.2A Resource Page and a coin with a “+” on one side and a “-” on the other side. You will need a small object such as an eraser or paper clip to use as a marker. Once you have all of your supplies, follow the directions below.

- a. Play the game several times and be sure to select a different color each time. Keep track of which colors win and lose each time, not just which partner wins. What do you notice?
- b. After you and your partner have played the game at least five times, join with another pair of students to form a team and discuss the following questions:
 - Does the color you choose seem to affect your chances of winning?
 - Is each color choice equally likely to result in a win? Explain why or why not in as many ways as you can.
- c. Play the game a few more times. Do your results agree with your answers from part (b) above? Why do your results make sense?

1-9. PLAYING THE GAME

Now you get to play the game! As a class, choose two colors (one for your class, one for your teacher) that you think will improve the class's chance of winning.

- a. Is there any color you could choose that would guarantee your winning the game every time you play? Explain why or why not.
- b. Is there a color that would guarantee that you would *not* win? Explain why or why not.

Is this game fair?
Why or why not?

