

# ***Practice Makes Perfect!***

***Math Strategies to Build Strong Number Sense***

presented by  
***Kim Sutton***



## ***Creative Mathematics***

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# Digit Cards



4

9

3

8

2

7

1

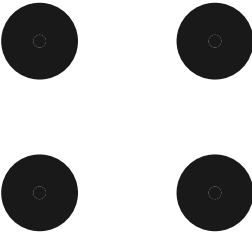
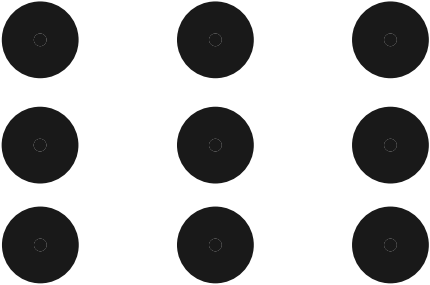

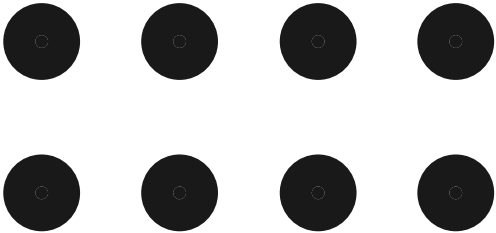

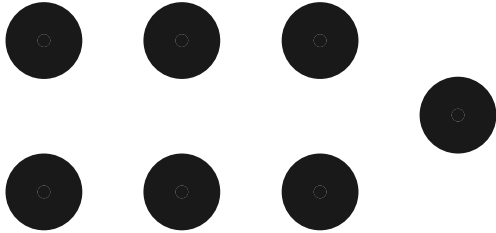

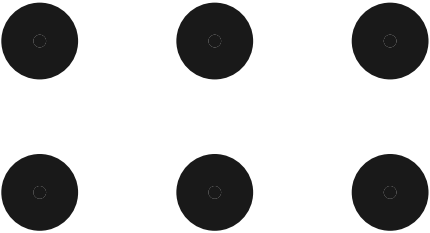
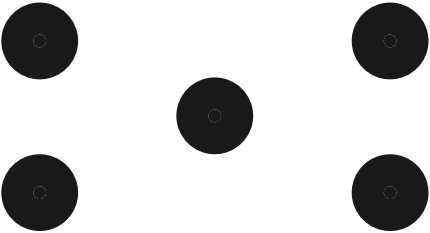
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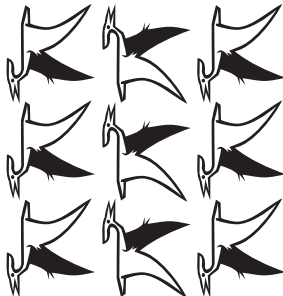



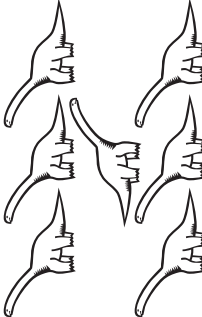





# Digit Card Mat

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|  |  |
|   |  |



# Digit Card Mat

|   |   |
|---|---|
|    |   |
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|  |  |
|   |  |



# ***Place Value Pocket***

| thousands | hundreds | tens | ones |
|-----------|----------|------|------|
|           |          |      |      |



# Subitizing and Make a Ten



## Bump It!



|  |  |  |  |
|--|--|--|--|
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# The Famous “Bump It” Rule

Your classroom is about to undergo a huge transformation! Students love any game that includes these rules. You will experience the “Bump It” rule many times in this workshop. It can be used on any partner game. You will see several of the “Bump It” rules applied to grid games, the Pattern Stick Game, and with many other games. These rules increase the motivation of any game along with the frequency in which students play the games.

The kicker that makes any game fun is the “Bump It” rule. If a player rolls a number and the opponent’s chip is on the answer, the player can bump the chip off the board. (There must be no other open answer!)

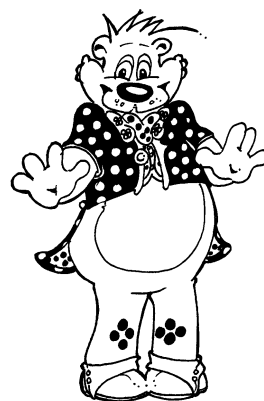
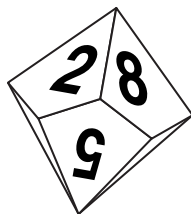


An additional rule will evolve. Students call it “Bump It Protection!” This is when a player’s chip is already on the sum. An additional chip is stacked on top of the original chip. If the opponent needs that sum, only one of the chips can be bumped. A third rule can be added. It is called “Bump It Protection With a Lock.” When a third chip is stacked, that sum is locked. All chips count in determining the winner.

The “Bump It” rule always promotes fluency because students want to increase their speed to get to “Bump It!”



# Rolling Pips



|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| • | • | • | • | • | • | • | • | • | • |
| • | • | • | • | • | • | • | • | • | • |
| • | • | • | • | • | • | • | • | • | • |
| • | • | • | • | • | • | • | • | • | • |
| • | • | • | • | • | • | • | • | • | • |
| • | • | • | • | • | • | • | • | • | • |
| • | • | • | • | • | • | • | • | • | • |
| • | • | • | • | • | • | • | • | • | • |
| • | • | • | • | • | • | • | • | • | • |
| • | • | • | • | • | • | • | • | • | • |





# Circle The Number

Name \_\_\_\_\_

Date \_\_\_\_\_

1.



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2.



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3.



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4.



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5.



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6.



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7.



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8.



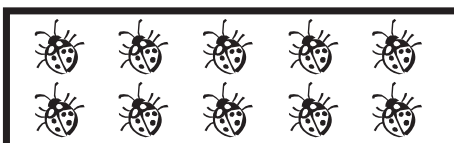
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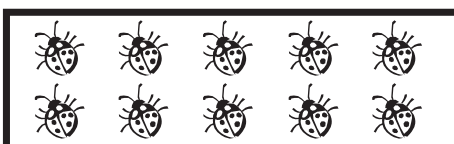
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### Math Tools:

- Concentration Board
- Concentration Cards
- Work Station
- Memory Tool Data Sheets

### Preparation:

Construct a class Concentration Board. Prepare games for board. Prepare a workstation for playing Concentration as a small group activity.

### Mathematical Intent:

Concentration practices working memory, coordinate graphing on a Cartesian Plane and whatever math skills are in the cards.

### Vocabulary:

x-axis  
y-axis  
numbers  
number words  
difference  
subtrahend  
minuend  
factor  
product  
tenths  
hundredths  
polygons

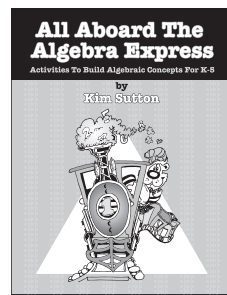
### Ron Brown

### Song Suggestions:

Select the music of Ron Brown of Intelli-Tunes based on the skills of the cards. It will be easy to match skill to song.

# Concentration Games

Concentration is a game for the elementary classroom to improve working memory, coordinate graphing on a Cartesian Plane and the math skills in the cards. (Remember, Concentration can be played in other curricular areas!) This game is perfect for whole class activities and small group reinforcement. In my book, **All Aboard The Algebra Express**, there is a geometry Concentration game and a workstation.



To be ready to make this amazing game a part of your classroom, you will need to construct the class Concentration Board. The model is shown on page 61.

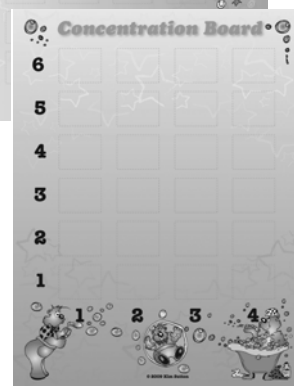
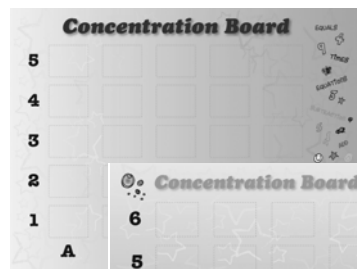
(To save yourself time, visit [www.creativemathematics](http://www.creativemathematics) and you will find primary and upper premade Concentration Boards as part of my poster line.)

If you are constructing it without my poster, it is easy. You will need a sheet of poster board, stick-on name tags, stick-on letters and numbers, a laminator and paper clips. Lay out the board using the name tags to make rows and columns. Stick the name tags on the poster board. Label the rows and columns selecting the format that fits your grade level.

K-2 Concentration Board will have the x-axis labeled with letters. The y-axis will be numbered. This will assist students in differentiating the x and the y. I say to students, "You go over to your friends house before you go upstairs to play!" Or the airplane travels across the runway before it go up in the air! The grades 3-5 Concentration Board will have both the x-axis and the y-axis labeled with numbers.

Once the board has name tags, numbers (letters), and a label, it is time to laminate. After laminating, use an exacto-knife to make a slit along the top edge of each name tag. This is where a paper clip is inserted to hold each Concentration card. I tape the paper clips down on the backside of the visual with shipping tape to hold paper clips in place.

Check out my new book, **Cooking Up Math Concentration** for games for every math skill.



# Primary Concentration Board

**5**



**4**



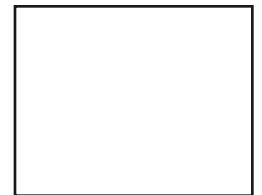
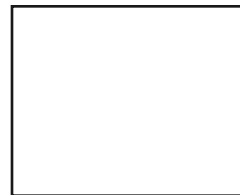
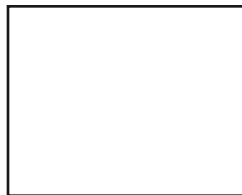
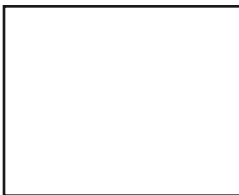
**3**



**2**



**1**



**A**

**B**

**C**

**D**

Example of Grades K-2 Concentration Board constructed with stick-on name tags, poster board, and stick-on numbers and letters.



# Subitizing Concentration

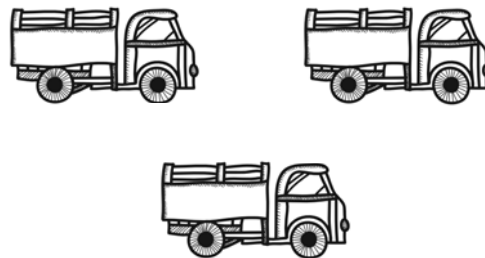
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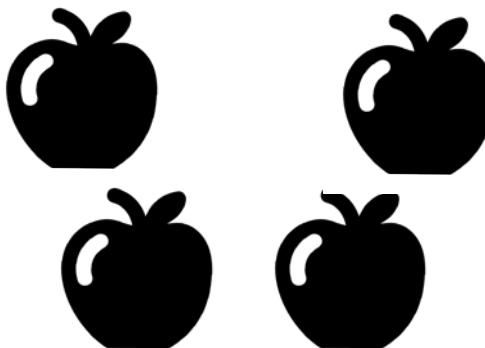
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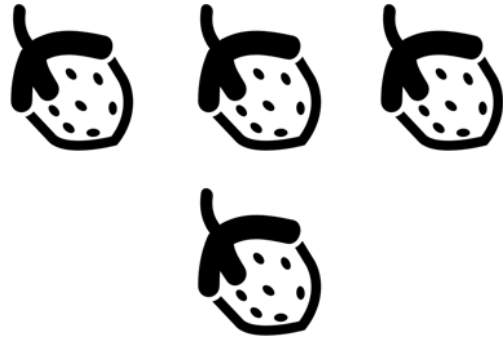


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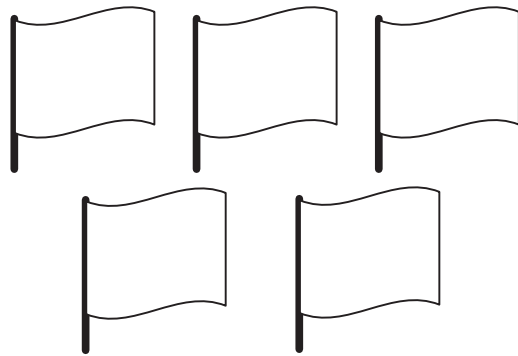


# Subitizing Concentration

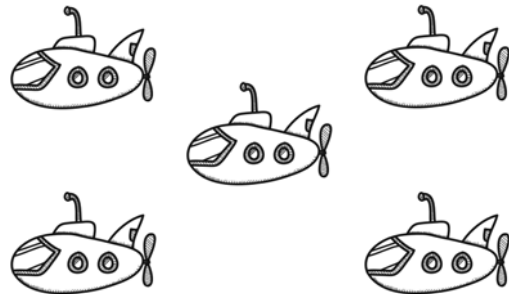
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5



five

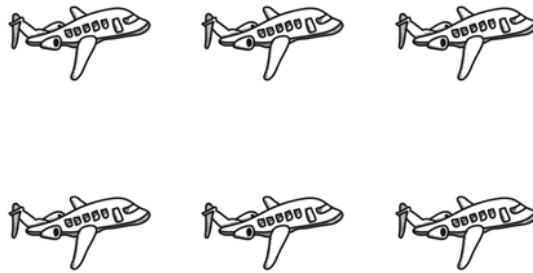


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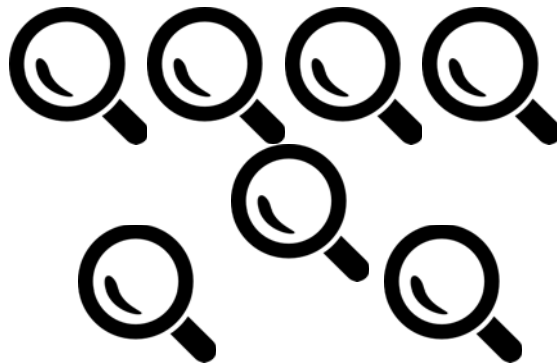


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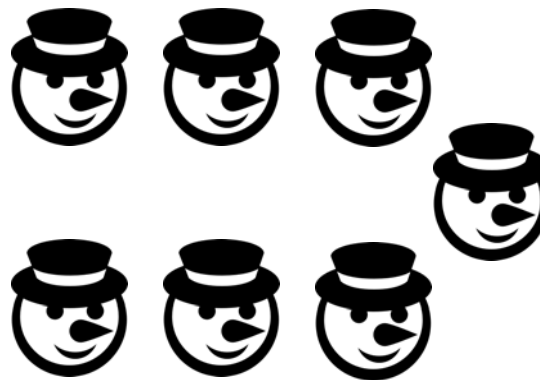
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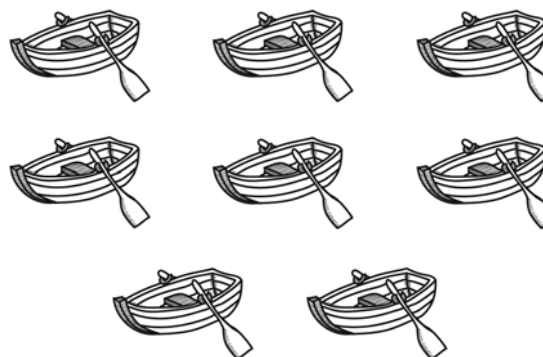
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seven



8

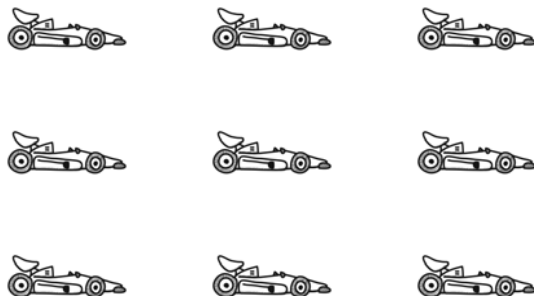


# Subitizing Concentration

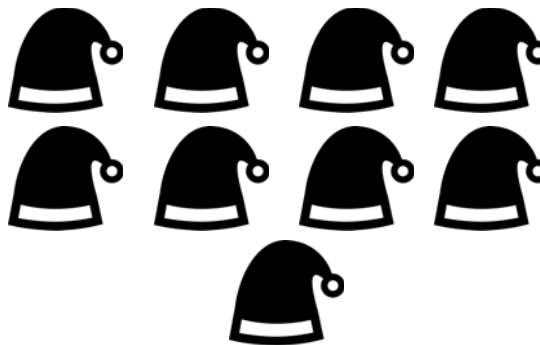
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9

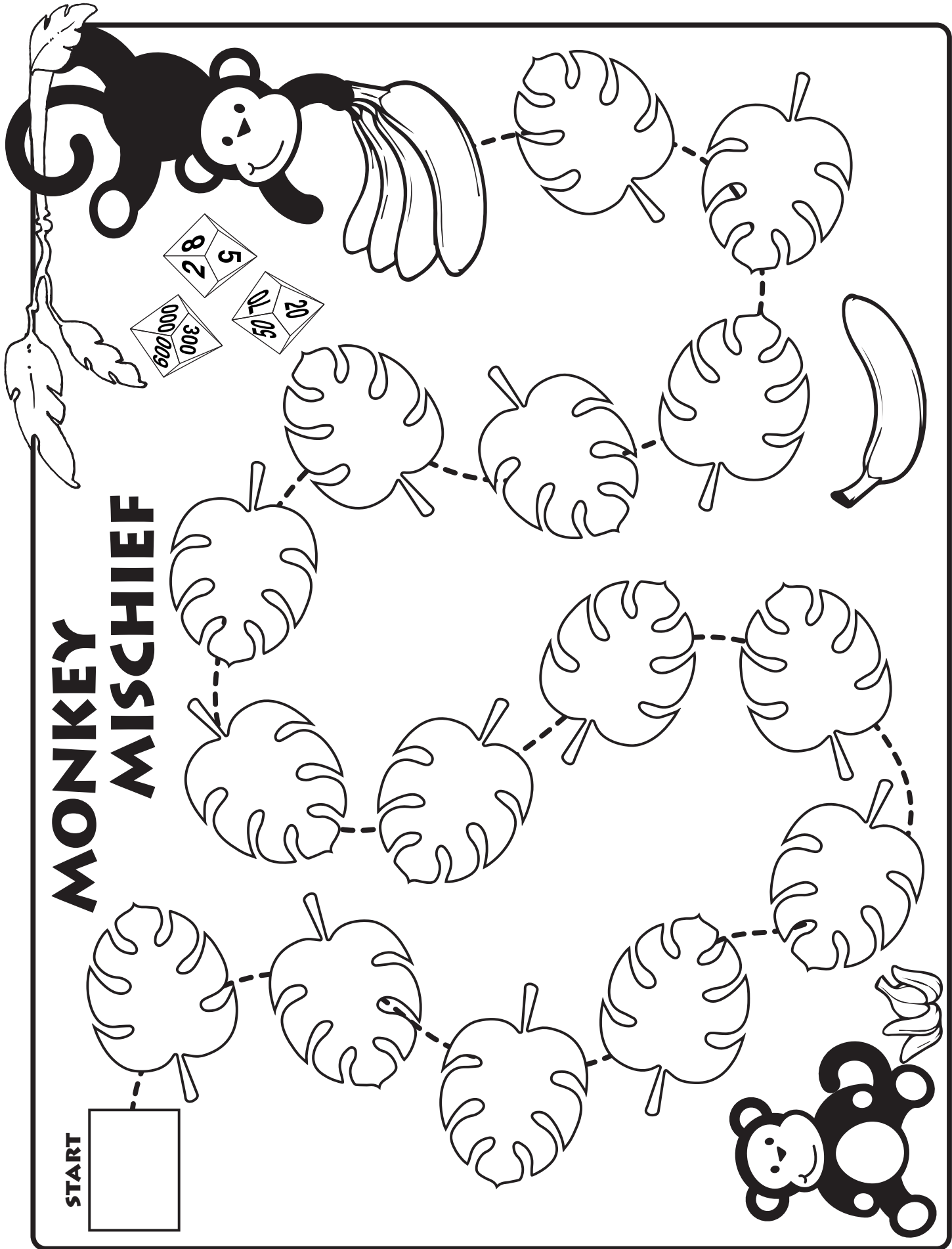


nine



10





# MONKEY MISCHIEF

START

