

# Home Connections Math Activities

## Grade 2

Number Sense and Numeration

Guess My Pattern Rule  
Show What You Know  
Time Me  
Lucky Rolls  
Number Detective

## Guess My Pattern Rule

1. Have your child create a pattern by placing some coins (or other small objects) on the hundreds chart attached. Ask your child to think about the rule that was used.
2. Try to guess your child's rule.
3. Play the game a few times. You can make the pattern rules too!

Opportunities to use hundreds charts or mats will allow students to explore counting patterns.

## Let's Talk About It

- What strategy did you use to create a pattern?
- Can you think of another strategy that would be helpful in creating a pattern?
- What patterns did you notice in the hundreds chart?

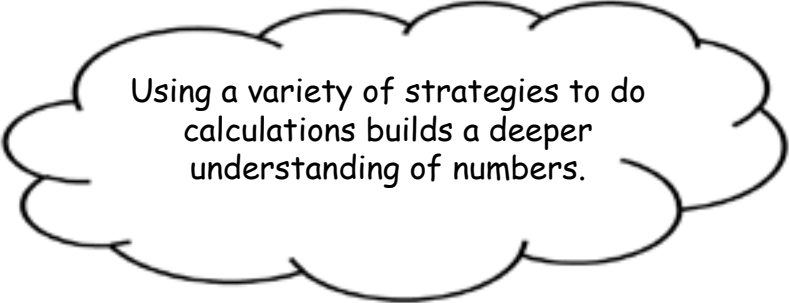
# Guess My Rule: Hundreds Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

## Show What You Know!

There are many ways to add numbers together.

1. With your child take a look and talk about the different ways 35 and 28 are added together on the attached sheet.
2. Ask your child to add the other numbers on the attached sheet in more than one way.



Using a variety of strategies to do calculations builds a deeper understanding of numbers.

## Let's Talk About It

- Which numbers did you find easiest to add together? Why do you think that is?
- Which numbers did you find you needed to work a little harder at to add? Why do you think that is?
- Did your strategy change based upon the numbers you were given to add? Why do you think that is?

# Show What You Know!



**For Example:  $35 + 28$**

$$\begin{aligned} 30 + 20 &= 50 \\ 5 + 5 + 3 &= 13 \\ 50 + 13 &= 63 \end{aligned}$$

$$\begin{aligned} 35 + 30 &= 65 \\ 65 - 2 &= 63 \end{aligned}$$

$$\begin{aligned} 35 + 25 &= 60 \\ 60 + 3 &= 63 \end{aligned}$$

$59 + 47$	$59 + 47$
$52 + 49$	$52 + 49$
$81 + 19$	$81 + 19$

## Time Me!

1. Have your child choose an activity from the attached chart.
2. Have your child estimate how long it will take to complete the chosen activity.
3. Use a clock, watch, or stop watch to time how long it actually takes.
4. Switch roles; now you can do the task while your child keeps track of the time.
5. Complete the other activities from the attached chart or make up your own activity.







Estimation helps students use logic and reasoning in problem solving situations with numbers and helps to judge how appropriate an answer is.

## Let's Talk About It

- How close were your estimates to the actual times to do the activity?
- Were some activities more difficult to estimate? Why?
- What strategy did you use to estimate?

# Time Me!



Activity	Estimated Time	Actual Time
<b>Brush My Teeth</b> 		
<b>Make My Bed</b> 		
<b>Wash My Hands</b> 		
<b>Set the Table</b> 		



# Lucky Rolls

Number of Players: 2 or more

**Materials:**

- 2 Dice 

**Rules:**

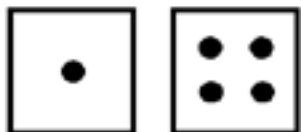
1. Your child will roll one die to decide the lucky number.
2. Players take turns rolling 2 dice. They can add or subtract the two numbers.
3. When a player makes the lucky number, he or she earns a point.

The first player to reach 10 points is the winner.

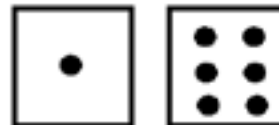
For example: The lucky number is 5



One and four makes 5.



Six take away one makes 5.



Addition and subtraction are inverse operations.

## Let's Talk About It

- What did you do to get points?
- Was it difficult to think of addition and subtraction at the same time? Why or why not?



# Number Detective

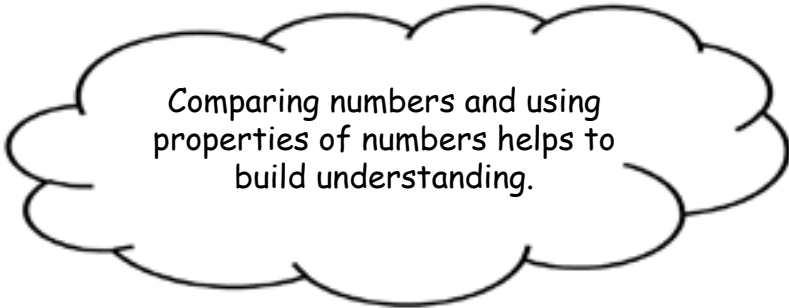
## Rules:

1. Tell your child that he or she is going to be a number detective and to find the number you are thinking of.
2. Think of a number between 0 and 100.
3. Have your child ask questions to discover what the number is.

## For example:

He or she may ask questions such as...

- "Is it bigger than 50?"
- "Is it an even number?"
- "Can I count by 10s to get to it?"
- "Is the tens digit bigger than the ones digit?"



Comparing numbers and using properties of numbers helps to build understanding.

## Let's Talk About It

- How did you discover the number?
- Which questions make it easier to guess the mystery number?
- What other questions could you use?