

LETTER HOME

Repeating and Growing Patterns

Dear Family Member:

Patterns surround us. We find patterns in our daily schedules, in the music we enjoy, and even in the tiles of the kitchen floor. Recognizing and working with patterns is an important part of mathematics.

Over the next few weeks, your child will strengthen his or her problem-solving skills by identifying and building patterns. For example, your child will use his or her name to complete a name grid and look for patterns in the grid. Students will also identify number patterns such as even and odd numbers and describe the patterns on a 100 Chart and on a number line.

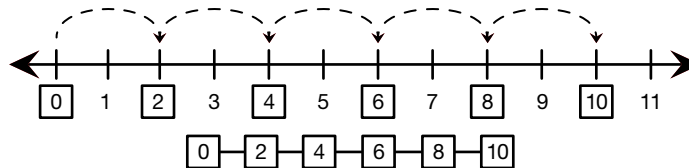
As we identify and build patterns at school, you can provide additional opportunities to work with patterns at home by doing the following activities:

M	O	L	L	Y	M	O	L	L	Y
M	O	L	L	Y	M	O	L	L	Y
M	O	L	L	Y	M	O	L	L	Y
M	O	L	L	Y	M	O	L	L	Y
M	O	L	L	Y	M	O	L	L	Y

Patterns on a name grid

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

Patterns on a 100 Chart



Patterns on number lines

- **Coin Patterns.** Use coins to start a pattern such as: nickel, penny, penny, nickel, penny, penny, nickel. Then invite your child to continue the pattern or build a pattern for you to extend. Look for ways to extend patterns such as asking your child to predict which will be the tenth or fifteenth coin in the pattern.
- **Pretty Patterns.** Invite your child to use beads, buttons, star stickers, or other household objects to build patterns. (Or your child might like to use shapes cut out of colored paper.) Help your child preserve a favorite pattern by stringing the objects on a piece of yarn.
- **Find Patterns.** Ask your child to find and describe patterns around the house or on a walk. Quilts often use repeating patterns. An excellent alphabet book based on American patchwork patterns is *Eight Hands Round* by Ann Whitford Paul. Your child may enjoy this book or other books with quilt illustrations at the library.
- **Tell Time with the Hour Hand.** Ask your child to look at only the hour hand on an analog clock to tell the approximate time. For example, a clock with the hour hand pointing at 2 is about 2 o'clock. When the hour hand is between 2 and 3, ask if it is right after 2 o'clock, halfway between 2 and 3 o'clock, or just before 3 o'clock.

Math Facts and Mental Math

This unit continues the development of the addition facts with sums to ten and specifically focuses on the facts in:

Group A: $0 + 1$, $1 + 1$, $2 + 1$, $3 + 1$, $0 + 2$, $2 + 2$, $3 + 2$, $4 + 2$

Group B: $3 + 0$, $4 + 0$, $4 + 1$, $5 + 1$, $6 + 1$, $5 + 2$, $6 + 2$, $5 + 3$, $7 + 1$, $1 + 8$

You can help your child develop strategies for these facts using the flash cards that are sent home or by making a set from index cards or scrap paper. Study the facts in small groups each night. As your child goes through the flash cards, put the cards in three stacks: Facts I Know Quickly, Facts I Can Figure Out, and Facts I Need to Learn.

For Facts I Need to Learn, work on strategies for figuring them out. A good strategy for the facts in Group A:

Count On. To solve $2 + 5$, think what is 2 more than 5. Or start at 5 and count on 2.

For Facts I Can Figure Out, use the flash cards to practice the facts for fluency. Ask your child to solve the related subtraction facts as well. For example, if $6 + 1 = 7$, what is 7 minus 1? Or 7 minus 6?

For Facts I Know Quickly, help your child use mental math strategies to:

Add 10s related to the addition facts. $16 + 1 = 17$, $30 + 10 = 40$, $11 + 8 = 19$

Solve the related subtraction facts. If $16 + 1 = 17$, what is 17 minus 16?

Thank you for taking time to talk with your child about what he or she is doing in math. Please feel free to contact me with any questions, concerns, or comments.

Sincerely,