

**Get ready to discover mathematics all around you this spring in everyday activities!**

**Just like reading, regular practice with problem solving, computation, and math facts will maintain and strengthen the mathematic gains you have made over the school year.**

**Enjoy these activities to explore problem solving at home. The goal is for you to have fun thinking and working collaboratively as a family to communicate mathematical ideas.**

**While you are working ask how the solution was found and why a particular strategy helped you solve the problem.**

**Literature and websites are also recommended to explore mathematics in new ways.**

Keeping a Math journal is a great way for children to log their ideas about Math as well as strategies for arriving at solutions. Here is an example of a journal entry:

April 6 - 20,  
While staying with my grandmother I noticed there were lots of humming birds in her garden. I decided to log how many humming birds visited her garden each week. I also noticed that there were more humming birds on some days than others.

So I decided to list the things I thought might attract the humming birds to her garden or keep away the humming birds away from her garden.

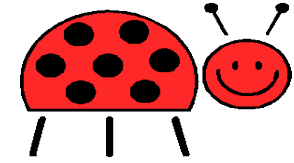
Here is the data I kept.

Conclusion: It seems like days with mild temperatures attract the most humming birds.

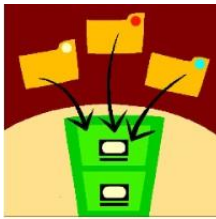
		Sunday	Monday	Wednesday	Thursday	Friday	Saturday
Week 1	Temperature	70	63	71	68	54	43
	Number of humming birds	66	63	68	65	2	0
Week 2	Temperature	50	62	68	70	71	50
	Number of Humming birds	1	60	64	67	70	0

What better way to jump into spring than with a fun ladybug theme!

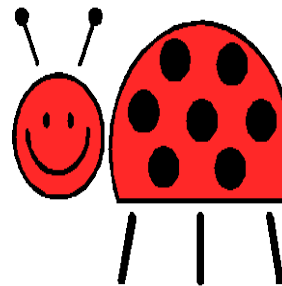
Be sure to check out these entertaining books on ladybugs.



## Math Activity Themes: Ladybug Math from Mathwire.com



- [Ladybug Math Activities](#)
- [Ladybug Glyphs & Graphing Ideas](#)
- [Math-Literature Connections: Ladybugs](#)
- [Ladybug Games](#)
- [Ladybug Problem solving](#)
- [Ladybug Music](#)
- [Ladybug Links](#)
- [Back to Math Activities Themes Menu](#)



## Ladybug Math Activities

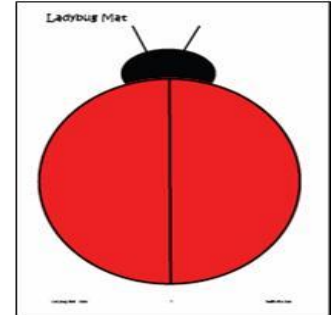
These small red insects have captivated many children familiar with the *Ladybug, Ladybug, fly away home* verse. These themed math activities easily integrate into science and/or literature lessons on insects and all things Spring.

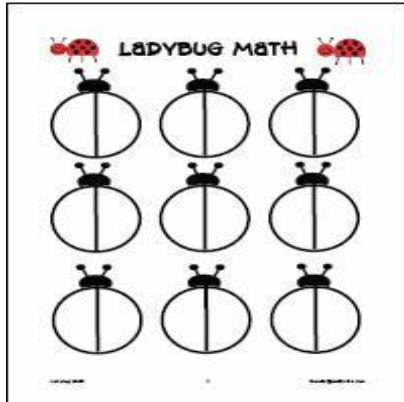
### Ladybug Math Mats

These math mats may be used for easy counting or for part-part-whole relationships of addends and sums. Students may use a variety of counters as dots or use foam circles which can be purchased in bulk at craft stores. Alternately, the mats may be inserted in sheet protectors, and students may use dry erase markers to draw the dots.

For simple fact practice, the student tosses a die and places that many dots on one side of the ladybug. He/she tosses the die again and places that many dots on the other side of the ladybug. The student counts the total number of dots and writes a number sentence to tell the sum.


- [PDF B/W Ladybug Mat](#) includes mat, recording sheet and number sentence template.
- [PDF Color Ladybug Mat](#), pictured at right, may be used with round counters or black foam circles.
- Download [PDF Ladybug Math](#) for directions for Ladybug number stories, recording sheet and number cards.





## Ladybug Odd & Even Numbers

Students use counters and their ladybug mats. Count out the correct number of counters for the given number. Place counters, alternating sides, onto the ladybug mat until all counters are placed. If there are the same number of counters on each side of the ladybug, then the number is an even number. If one side has an extra counter (spot), then the number is an odd number.

- Download [PDF Ladybug Math](#) for directions for Odd and Even Ladybugs, recording sheet, number cards and Odd/Even Recording Sheet.
- [PDF B/W Ladybug Mat](#) includes mat, recording sheet and number sentence template.
- [PDF Color Ladybug Mat](#), pictured above, may be used with round counters or black foam circles.
-  **Suggestion for Morning Math Routines:** Place a ladybug template in a sheet protector or laminate the ladybug. Use a dry-erase marker to add a new spot each day. Discuss whether the ladybug has an odd or even number of spots, based on whether there are the same number of spots on each side of the ladybug. Incorporate this practice into morning routines to reinforce odd and even numbers.

## Ladybug Glyphs & Graphing Ideas



### Ladybug Glyphs

- See Shari Sloane's [Ladybug Glyphs](#). Scroll down the Glyphs page to locate the Ladybug pictures and files which can be downloaded for classroom use.
  - View [Shari Sloane's Ladybug Glyph Legend](#).
- See Vicki Blackwell's [Grouchy Ladybug Unit](#) for a ladybug glyph. The site features a downloadable Word document of the glyph legend.



### Ladybug Graphing

Use a variety of graph formats to collect data: clothespin graph, bar graph, Venn diagram, etc. Using different formats and discussing your choice models effective mathematical thinking and decision-making for younger students.

- Have you ever caught a ladybug?
- Do you know the Ladybug verse?
- What is your favorite ladybug book?



## Math-Literature Connections: Ladybugs

### *The Grouchy Ladybug* by Eric Carle



- Download a [Grouchy Ladybug Clock](#)
- View an entire [Ladybug Unit](#) from Homeschool Share which includes the template for a Day with the Grouchy Ladybug layer book [see below.]
- [I Can Follow Directions](#) requires students to draw legs and spots on the ladybugs, then count the total numbers.
- See [NCTM's Grouchy Lessons of Time](#) for suggestions for mathematically extending this book for different grade levels.

## Ladybug on the Move by Richard Fowler

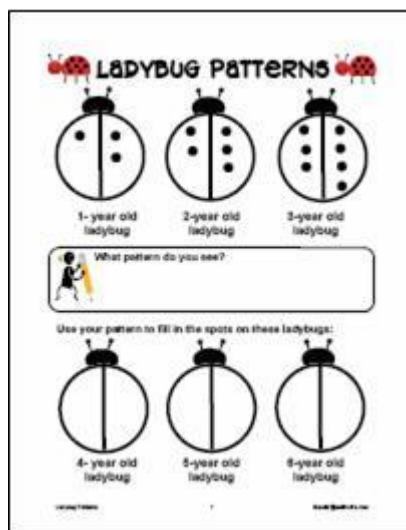


- See [NCTM's Ladybug Lengths](#) for a measurement lesson based on this book.
- See NCTM's [Hiding Ladybugs Game](#). Students must plan a path that will take the ladybug beneath the leaf for a great problem solving experience. This online applet encourages students to refine their paths until they are ultimately successful.
- [Ladybug Leaf](#) is another online version of this applet game that requires students to estimate distances in a Logo-like environment.

## Ladybug Games

### Ladybug, Fly Home! Game

The [PDF Ladybug, Fly Home! Game](#) uses a one-die toss to move that numbered ladybug one space closer to her home. Students add their results to the Class Recording sheet by adding a tally mark for the winning ladybug. Class discussion focuses on the fairness of the game by asking if each ladybug has an equal chance to win? PDF file includes directions, game mat, recording sheet and math center icons



## Ladybug Problem Solving

- [PDF Ladybugs](#) introduces students to the algebraic concept of growing patterns or functions. In this case, the dots on the ladybug change with age. Students will use a picture and a function table to analyze the pattern's growth and write a rule in words and/or variables/numbers.
- Download [PDF Ladybug Patterns](#) for a worksheet for students to write about the pattern, then extend the pattern.
- Download [PDF Ladybug Patterns: Blank Template](#) so that students can create their own Ladybug Patterns to challenge classmates.

## Ladybug Music



- Singing is a strength for many young learners. Teach students the Sesame Street *Ladybug's Picnic* song to reinforce counting to 12.
  - See the You Tube [Video](#) of this Sesame Street song
  - Download [Lyrics](#) for the song.
- See NCTM's [Hiding Ladybugs Game](#). Students must plan a path that will take the ladybug beneath the leaf for a great problem solving experience. This online applet encourages students to refine their paths until they are ultimately successful.
- Check out NCTM's [Making Rectangles](#) to teach the ladybug to draw rectangles on the screen.
- NCTM's [Ladybug Mazes](#) completes the series by challenging students to plan a path that will move the ladybug through a maze. Once again, students are able to play the path and see how the ladybug moves. They may then choose to refine their path until the ladybug successfully moves through the entire maze.
- Play BBC's [Count Hoot's Addition Game](#) where students must select the ladybug with the correct number of spots to be the missing addend in the given problem.
- Play the [Odd Olly and Even Elly Game](#) to help students master odd and even numbers.
- See [Ladybug Page](#) for ladybug resources including a second grade webquest.
- Enjoy the patterns in a [Ladybug Quilt](#) and read more about this teacher's [Quilt Designs](#). Consider creating a construction paper ladybug quilt with students.
- The [Don't Get Bugged about Missing Numbers](#) lesson plan uses ladybugs with missing dots. Students look at the number on the ladybug's body, count the number of dots on one wing, then add the correct number of dots to the other wing.
- The [Ladybug Problem](#) uses estimation by counting the number of ladybugs on one tile, then multiplying by the number of tiles to completely estimate the ladybug population.
- **Ladybug Music:** See lyrics and hear sample of the song [Ladybugs](#) which practices multiplying by 6.
- **Ladybug Music:** Teach students the *Ladybug's Picnic* song to reinforce counting to 12.
  - See the You Tube [Video](#) of this Sesame Street song
  - Download [Lyrics](#) for the song.

## More Ladybug Links





**Fun Websites to Explore all Year Long:**

**www.funbrain.com**

**www.aplusmath.com**

**www.pbskids.org**

**www.illuminations.nctm.org**

Click on **ACTIVITIES**. Click on **K-2** and press **SEARCH**.

## Card Games To Play (You will need a deck of cards)

### 1 Compare

Remove the face cards from a deck of cards. Remember an Ace is the same as 1. Pass out all of the cards in the deck among all of the players. Each player flips over one card at the same time. The player with the higher number keeps both cards. If the two cards are the same, turn over another card. The player with the higher number keeps all four.

### 2. Double Compare

Same as above, but turn over two cards each time and find the sum. The one with the larger sum takes the cards.

### 3. Close to 10

Remove the face cards from a deck of cards. Deal 3 cards to each player. Which two cards brings you closest to 10? Which player is closest to 10? Example: You turn over the cards 5, 4, 3 and your opponent turns over an Ace, 8, and 3. You can make 9 (5 and 4) and your opponent can make 9 (Ace and 8) or 11 (8 and 3). It's a tie since you are both 1 away from 10!

### Other games to play:

Checkers, Memory, Chutes and Ladders, jigsaw puzzles, Parcheesi, Fish, Crazy Eights, Candy Land, Blink, Connect Four, Legos, K'Nex.

Check out the PDF: [Making Math More Fun Board Games](#) that contains a variety of board games for different grade levels..