

"Bug Math"



National Standards

- Describe how different materials, techniques and processes cause different responses. (NA-VA.K-4.1)
- Use different media, techniques, and processes to communicate ideas, experiences and stories. (NA-VA.K-4.1)

Objectives

Students learn:

- One to one correspondence
- Number sequence
- Counting
- Beginning grouping
- Hand-eye coordination
- Fine motor skills

Time Frame

30 min.

Materials

Dixon® Prang® Materials

- Color Wands®
- Washable Markers (Classic) (conical tip)
- Fine Line Markers
- Dixon® Pencils

Other Materials

- Construction paper, assorted colors
- White copier paper
- Wiggle eyes, 10 mm, assorted colors, (or black and white), 2 per ladybug
- Glue sticks, 1 per 2 students
- Cotton swabs, several per student

Teacher Preparation

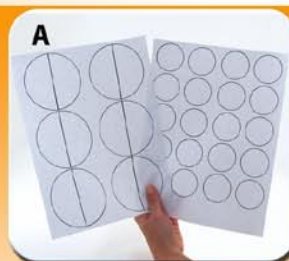
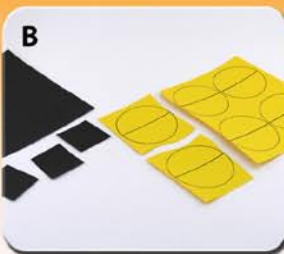
- On copier paper, trace 1 3/4" circles for heads. On another sheet, trace 3" circles for bodies. Trace over lines with black fine line marker. On bodies, draw line down center of each circle, using black conical tip marker.

See Photo A

- Photocopy "head" sheet onto black construction paper and "body" sheet onto assorted colors of construction paper. Separate circles by cutting between them.

See Photo B

- Make a few samples.



WHY use Prang® Color Wands® & Washable Markers?

The vivid colors, smooth application and blending capability of Color Wands® make them superior to any "regular" wax crayons. The Prang® brand markers are easily washable from clothes and hands. Both are AP certified non-toxic.

Professor Prang®



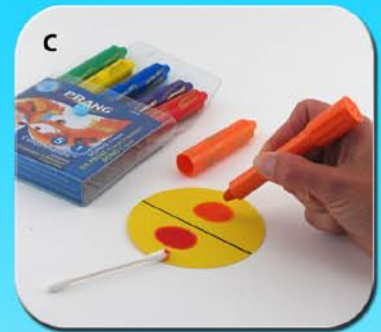
Directions

Discuss with students that ladybugs have spots, explaining that it's fun to make cartoon bugs with spots that we can count. Draw ladybugs on the board and practice counting.

1. Have students cut out one large colored circle and one small black circle. (Caution students not to cut center line.)
2. Assign students the number of circular spots (1-10) that they should lightly draw on their ladybugs using their pencils.

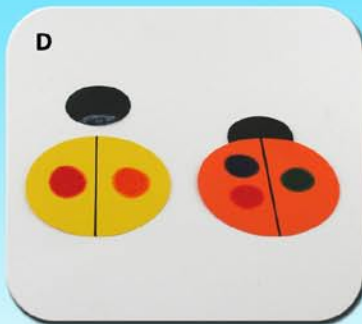
3. Have students use assorted colors of Color Wands® to color in the drawn circles. Demonstrate and have students “smooth” the circles by rubbing each one with a cotton swab. (Change swabs with each color.)

See Photo C



4. Draw head on the board and fill in the area where students should apply glue. Show how to place body with spots up and line running up and down center of back. Remind students to just barely overlap body over head. Check bugs to be sure of placement.

See Photo D



5. Have students glue wiggle eyes onto heads. (Preferably the bug's, not theirs!)

See Photo E



Modifications

- Pre-cut body and head circles.
- Draw outlines of spots and have students fill in.
- Use conical markers for spots and eyes.
- Have students trace body and head circles using stencil.
- Add paper strips or chenille stems for legs.

Additional Ideas

- Later use for early addition or subtraction by adding or subtracting dots on each side of center line.
- Have students make individual sets of bugs.
- As a center activity, provide worksheets with bug outlines. Students sequence bugs on table and duplicate on worksheets.

Safety Tips

- Follow standard scissors safety precautions.
- Be cautious of small wiggle eyes, due to choking.

References

- *Ladybugs* by Melvin and Gilda Berger
- *The Grouchy Ladybug* by Eric Carle
- *Ladybug, Ladybug* by Ruth Brown
- *The Ladybug and Other Insects* by Gallimard Jeunesse and Pascale deBourgoing
- *Eye Spy a Ladybug* by Melinda Lilly
- *Count to Ten* by Emily Thompson

Attention Teachers

If you have a great lesson plan, submit it to Dixon® for publication consideration. If chosen, you'll receive \$50 in Prang® Products! Send us your best! Mail to address at right. Please include: Dept. Professor Prang®! Thanks!

DIXON®

DIXON TICONDEROGA COMPANY

“Since 1795”

A **FILA** COMPANY

195 International Pkwy
Heathrow, FL 32746
800.824.9430
www.dixonticonderoga.com

**PRANG
POWER™**

www.prangpower.com

Lesson Plan # Dixon-MA-1001