



GRADE 1 SUPPLEMENT

Set C2 Geometry: Ladybug & Butterfly Calendar Pattern

Includes

October Calendar Pattern

C2.1

Skills & Concepts

- ★ demonstrate an understanding of position words, including *above/below*, *behind/in front*, *near*, *far*, and *between* by describing the relative location of objects
- ★ identify, describe, and extend repeating patterns
- ★ read aloud numerals from 0 to 31
- ★ identify ordinal positions through the 31st

Bridges in Mathematics Grade 1 Supplement

Set C2 Geometry: Ladybug & Butterfly Calendar Pattern

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Bridges in Mathematics is a standards-based K–5 curriculum that provides a unique blend of concept development and skills practice in the context of problem solving. It incorporates the Number Corner, a collection of daily skill-building activities for students.

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Set C2 ★ October Calendar Pattern



CALENDAR GRID

Ladybugs & Butterflies

Overview

This set of Calendar Grid markers replaces the student-made markers in the month of October, and provides opportunities for first graders to practice using key prepositions and prepositional phrases as they identify and discuss the position of ladybugs and butterflies relative to flowers and leaves on each marker.

Skills & Concepts

- ★ demonstrate an understanding of position words, including *above/below*, *behind/in front*, *near*, *far*, and *between* by describing the relative location of objects
- ★ identify, describe, and extend repeating patterns
- ★ read aloud numerals from 0 to 31
- ★ identify ordinal positions through the 31st

You'll need

- ★ Calendar Grid pocket chart
- ★ Month and Year Calendar Grid cards
- ★ October Ladybug & Butterfly Calendar Markers (available at <http://gotomlc.org/calmarkers>) Print 1 copy of the calendar marker sheets, preferably in color, single-sided, on white cardstock. Cut the calendar markers apart and laminate if desired.
- ★ 2 sheets of lined chart paper (see Advance Preparation)
- ★ helper jar containing a popsicle stick for each child with his/her name on it
- ★ *All about Where* by Tana Hoban (optional)
- ★ *Over, Under, and Through* by Tana Hoban (optional)

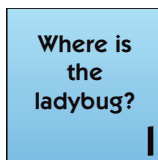
Introducing the Ladybug & Butterfly Calendar Grid Pattern

Open your first Number Corner lesson in October by directing students' attention to the calendar grid. Explain that you will put up a new calendar marker as each day of the month passes. Place the first marker in the correct pocket, and ask children to pair-share observations.

Advance Preparation Label the top of one of the pieces of chart paper with the words "Calendar Grid Observations". Laminate the 2 sheets of chart paper, and then use an erasable marking pen and yardstick to mark off 3 columns on both of them. Head the columns on the first sheet as shown below. Use the second piece of chart paper to extend the observation sheet mid-way through the month. Use an erasable marker to draw the columns and record students' observations, so you can re-use the sheets each month.

Calendar Grid Observations		
Date	Position	Similar Words

October Calendar Pattern (cont.)



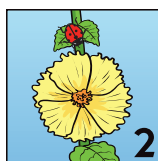
What do they notice about this marker? After a few moments, pull popsicle sticks from your helper jar to call on children to share their observations with the class.

Students *It just has words on it!*
No, there's a number on it too. See the 1 at the bottom?
Those words say, "Where is the ladybug?"
But there isn't any ladybug. What are they talking about?

Then ask children to predict what they might see on the marker for the following day.

Students *There might be a ladybug on it.*
I think it will have the number 2 because that's what comes after 1.
Maybe there will be 2 ladybugs, and then 3 after that.
It will probably be a red ladybug.

The following day, post the second marker on the calendar grid. Have children pair-share observations, and then call on volunteers to share their ideas with the group. As students share, ask them to describe the location of the ladybug relative to the flower. Chances are, they will use words such as *up*, *over*, and *on top*. Guide them to use the word *above*, but acknowledge their descriptions as well.



Students *There's a 2 on the card, and a ladybug.*
There's just one ladybug.
There's a flower, too.

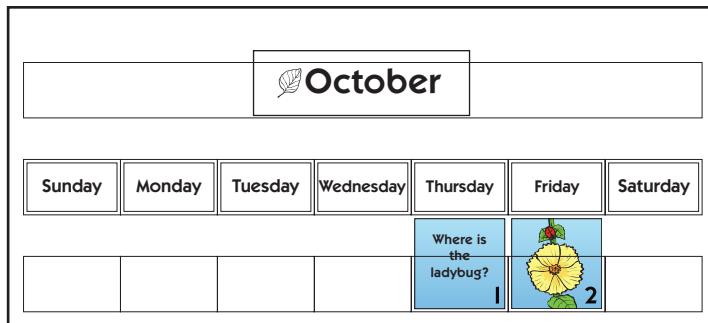
Teacher *Where is the ladybug?*

Students *It's coming to the flower. Maybe it lives there.*
The ladybug is up on the card.
It's on top of the flower.
The ladybug is over the flower; the flower is under the ladybug.
The ladybug is up and the flower is down.

Teacher *Sometimes people use the words "above" and "below" to describe locations. Can we say that the ladybug is "above" the flower?*

Students *Yep, and the flower is below the ladybug.*
The 2 is down at the bottom. It's even below the flower.

October Calendar Pattern (cont.)

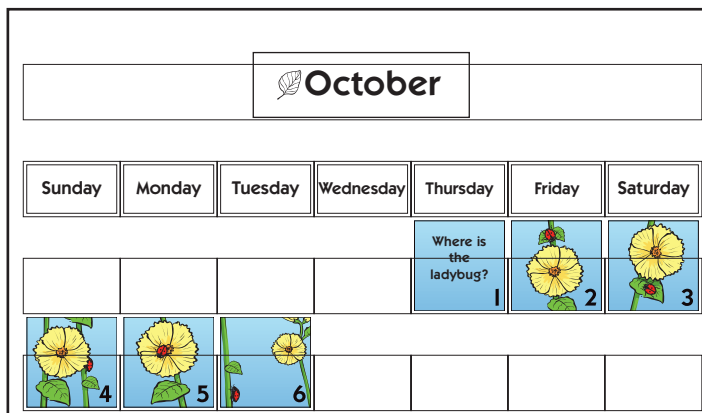


Calendar Grid Observations		
Date	Position	Similar Words
2	Above	on top, over, up

Continuing through October with the Calendar Grid

Each day, have a helper point to the markers that have been posted in the pocket chart as the class names the position of the ladybug relative to the flower. Have children predict what the next marker will show before you place it on the chart. Once the new marker has been posted, ask students to share their observations. Encourage them to use any words and phrases they can to describe the position of the ladybug relative to the flower each day, but also guide them to use the words *above*, *below*, *behind*, *in front*, *far*, *near*, and *between*. Help students track the sequence of positions by recording the key word on the observation chart each day, along with any similar terms volunteered by the class during discussion.

Teacher *Let's name the position of the ladybug on each marker we've posted so far, and then make some predictions about what we'll see on today's marker. James, will you point to the markers as we name the position of each ladybug? The ladybug is...*



Students *...above the flower, below the flower, behind the flower, in front of the flower, far away from the flower.*

I think there's going to be a ladybug close to a flower today because yesterday it was far away. Yeah, it keeps going the other way, like above, below; behind, in front; so maybe it'll be far away and then close up for today.

Teacher *Good predictions! Let's post the marker for today and share our observations. I'll record some of our ideas on the chart.*

October Calendar Pattern (cont.)

October						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				Where is the ladybug? 1	2	3
4	5	6	7			

Calendar Grid Observations		
Date	Position	Similar Words
2	Above	on top, over, up
3	Below	under, underneath, bottom
4	Behind	in back of, after, hiding
5	In Front	in front of, on top of, before
6	Far	far apart, going toward, not close
7	Near	close together, beside, next to

Here are some questions and prompts to use through the month:

- Let's name the position of each ladybug (butterfly) as our helper points to the markers.
- Where do you think the ladybug (butterfly) will be on the next marker? Why?
- Where is the ladybug (butterfly) on the 3rd (7th, 12th, 26th) marker?
- I see a ladybug *between* 2 flowers. Which marker(s) am I looking at?
- I see a butterfly *below* a flower. Which marker(s) am I looking at?

As the month progresses, students will discover several different patterns in the sequence of markers. Markers 1, 9, 17, and 25 each feature a question: Where is the ladybug? or Where is the butterfly? The positions of the insects repeat in a predictable manner: above, below, behind, in front, far, near, between; above, below, behind, in front, far, near, between. The markers alternate between sets of ladybugs and sets of butterflies.

Note Each of the ladybugs and butterflies on the first 16 markers is positioned with respect to a flower. On markers 18 through 31, each is positioned with respect to a leaf.

Extensions




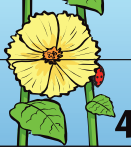

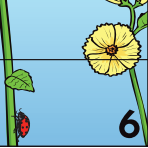

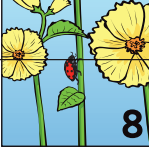





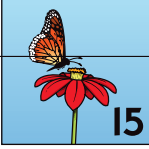



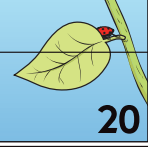
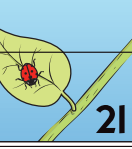


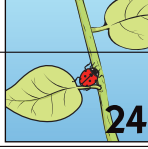

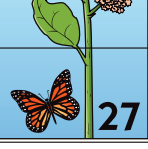

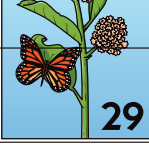
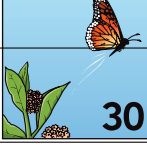

- Reinforce prepositions by asking children to place their right (or left) hand in different positions relative to their body, such as:
 - *in* their lap
 - *on* their right knee, *on* their left knee
 - *beside* their right leg, *beside* their left leg
 - *above* or *over* their head
 - *below* their waist
 - *under* their right foot, *under* their left foot
 - *behind* their back
 - *in front* of their chest
 - *near* their right ear, *near* their left ear
 - *far away* from their mouth
 - *between* their knees

October Calendar Pattern (cont.)

- Reinforce the language of position and location by reading *All about Where* and/or *Over, Under, and Through*, both by Tana Hoban.
- If you have a computer in your classroom with Internet access, some of your first graders may enjoy two of the applets found on the Utah State National Library of Virtual Manipulatives web site: Ladybug Leaf and Ladybug Mazes. The web site is free to all, and can be accessed at <http://nlvm.usu.edu/>. Follow the links to the Pre-K through 2 geometry section, where you'll find a variety of applets including Ladybug Leaf and Ladybug Mazes. Both of these activities involve programming a ladybug around the screen to either hide behind a leaf (easier) or move through a maze (more challenging). Both provide good spatial problem-solving challenges, as well as practice with directional language and skills (forward, backward, right, left). Instructions are included with each applet on the web site, along with suggestions for parents and teachers. Another applet students may enjoy is Turtle Geometry, also found on the National Library of Virtual Manipulatives web site.

October Calendar Pattern (cont.)

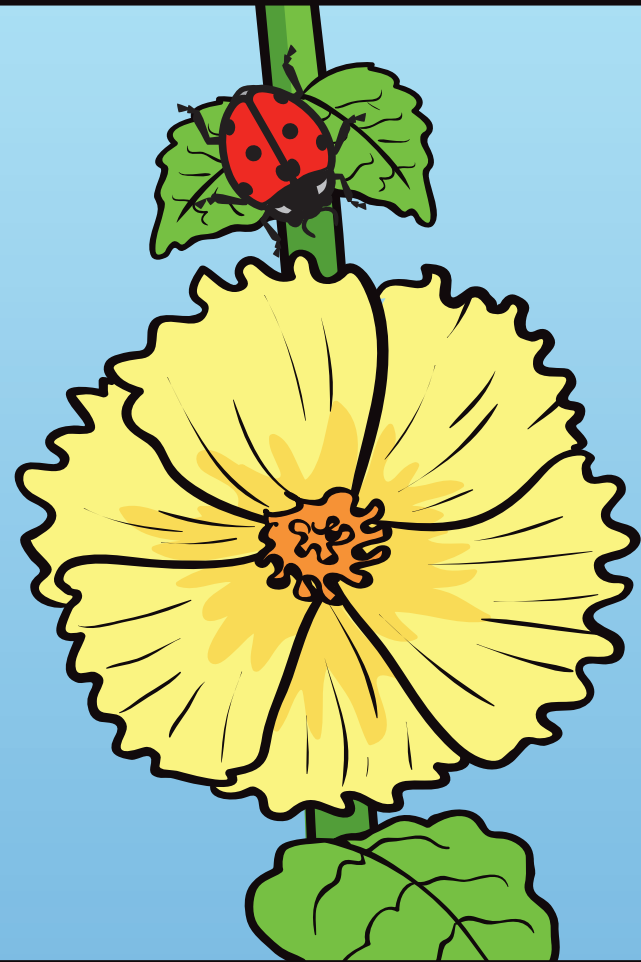
NOTE Below is a representation of the October calendar grid. The full-size calendar markers are available at <http://gotomlc.org/calmarkers>.

 October						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				Where is the ladybug? 1	 2	 3
 4	 5	 6	 7	 8	Where is the butterfly? 9	 10
 11	 12	 13	 14	 15	 16	Where is the ladybug? 17
 18	 19	 20	 21	 22	 23	 24
Where is the butterfly? 25	 26	 27	 28	 29	 30	 31

October Ladybug & Butterfly Calendar Markers Sheet 1 of 16

Where is
the
ladybug?

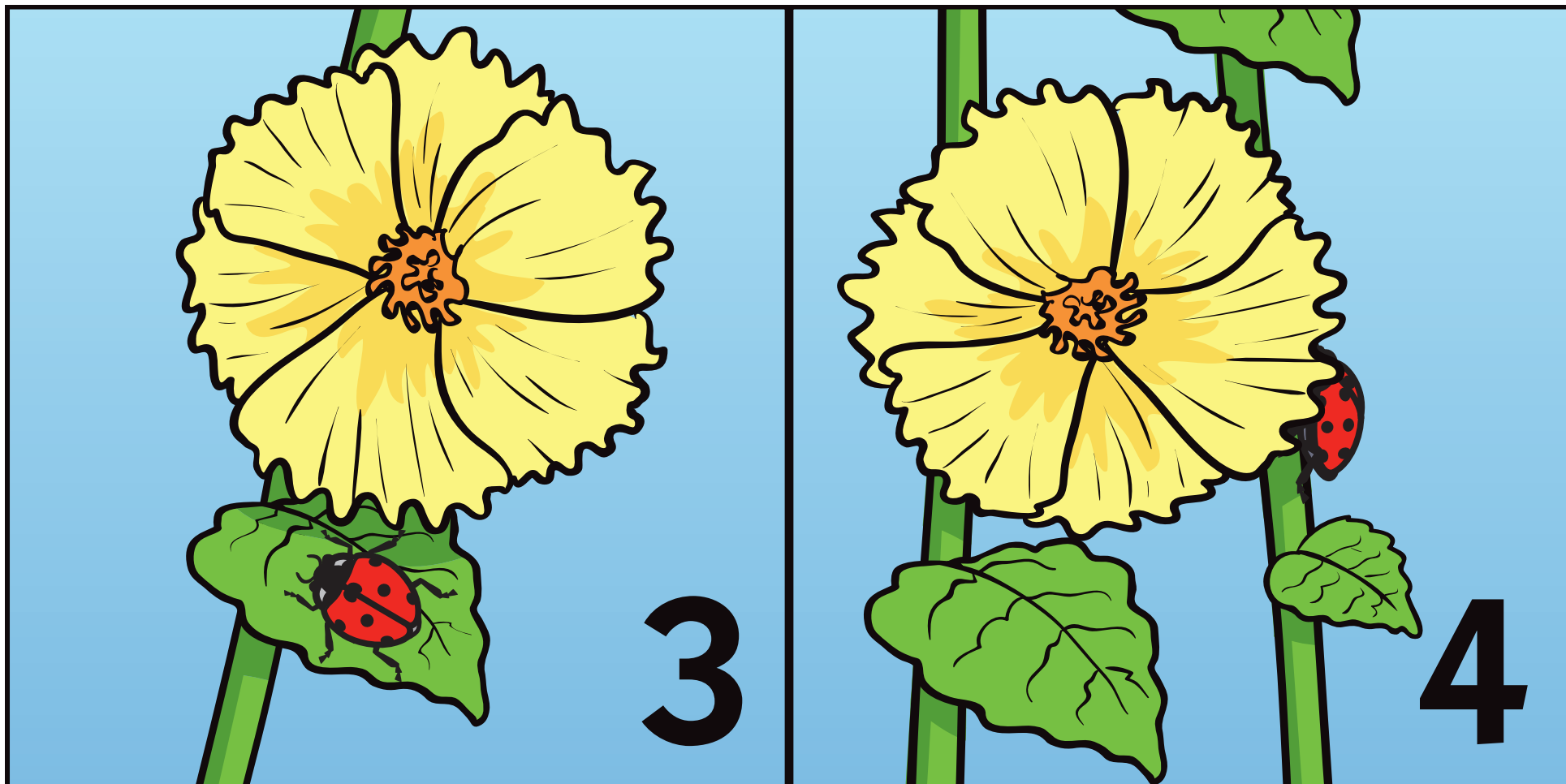
1



2

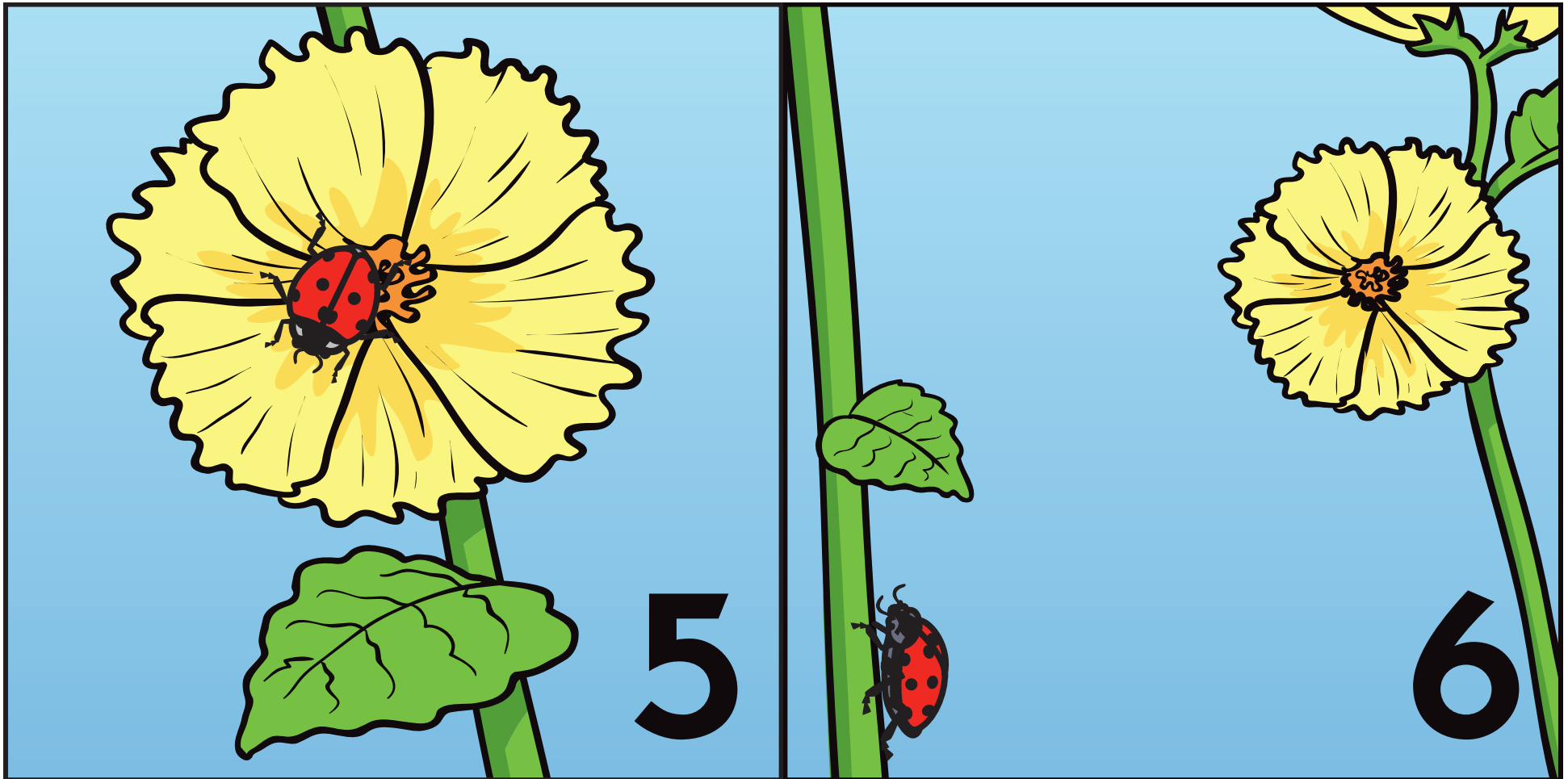
Print 1 copy of the calendar marker sheets, preferably in color, single-sided, on white cardstock. Cut the calendar markers apart and laminate if desired..

October Ladybug & Butterfly Calendar Markers Sheet 2 of 16



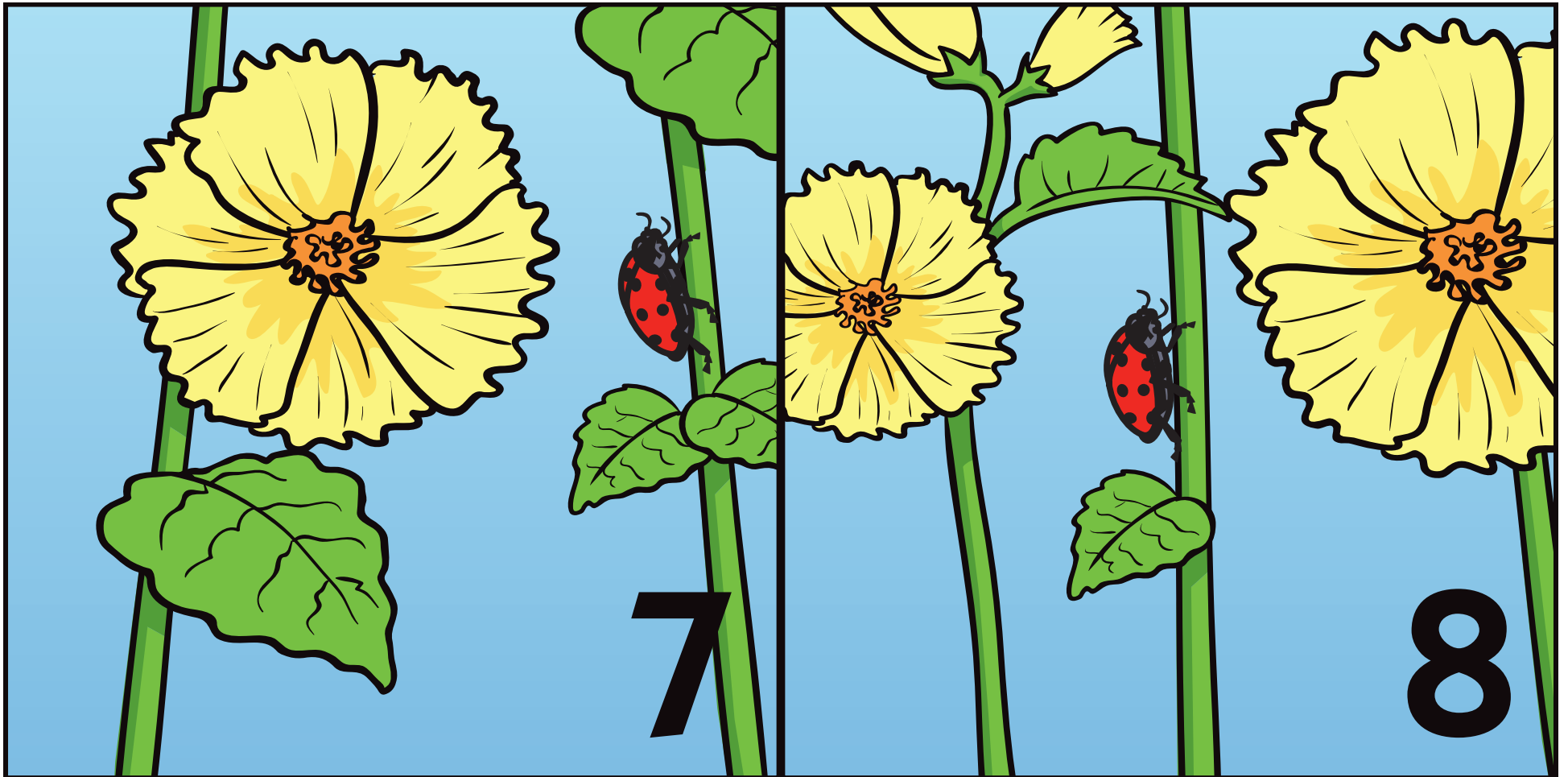
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October Ladybug & Butterfly Calendar Markers Sheet 3 of 16



Print 1 copy of the calendar marker sheets, preferably in color, single-sided, on white cardstock. Cut the calendar markers apart and laminate if desired.

October Ladybug & Butterfly Calendar Markers Sheet 4 of 16



October Ladybug & Butterfly Calendar Markers Sheet 5 of 16

Where is
the
butterfly?

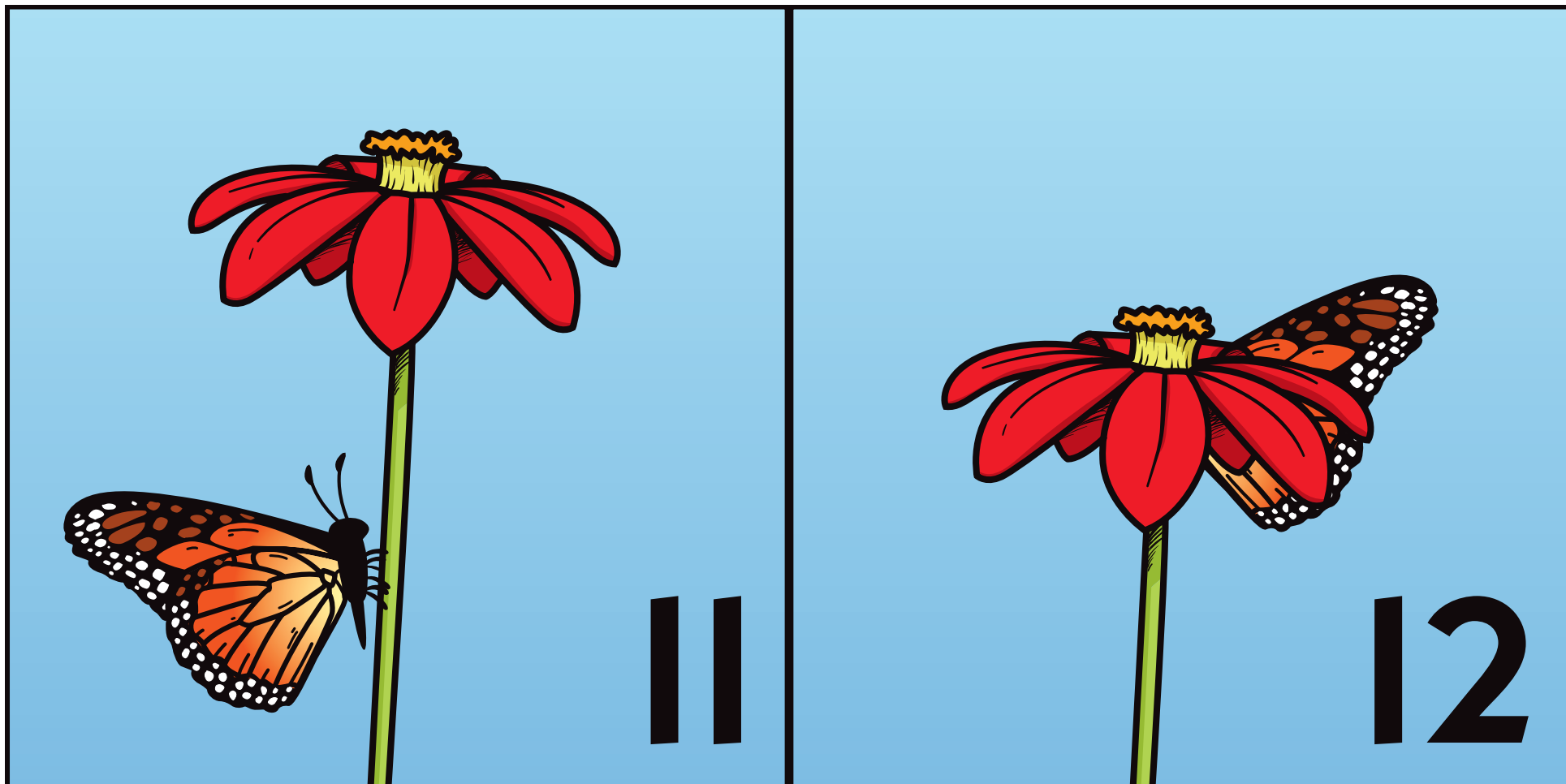
9



10

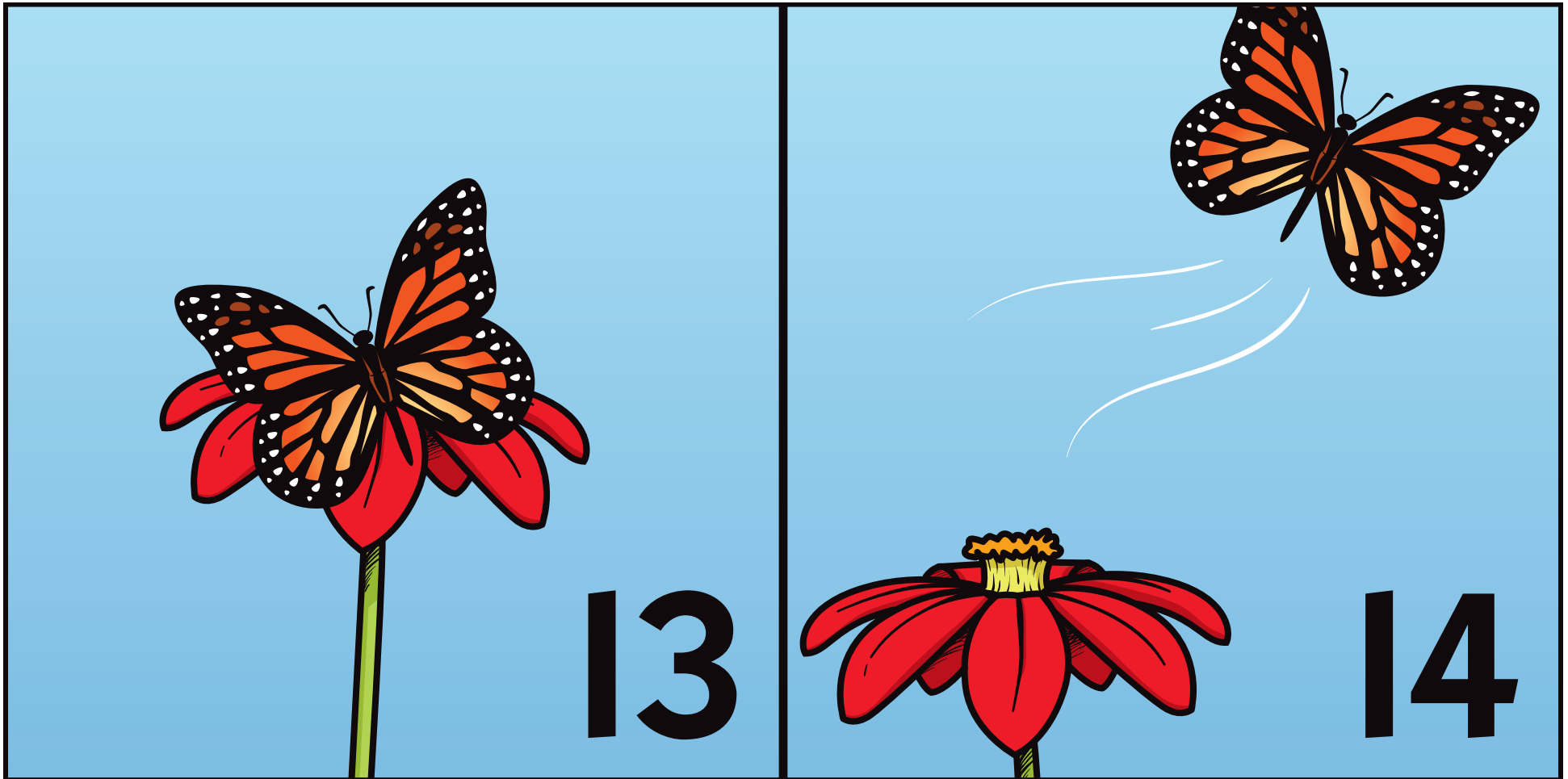
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October Ladybug & Butterfly Calendar Markers Sheet 6 of 16



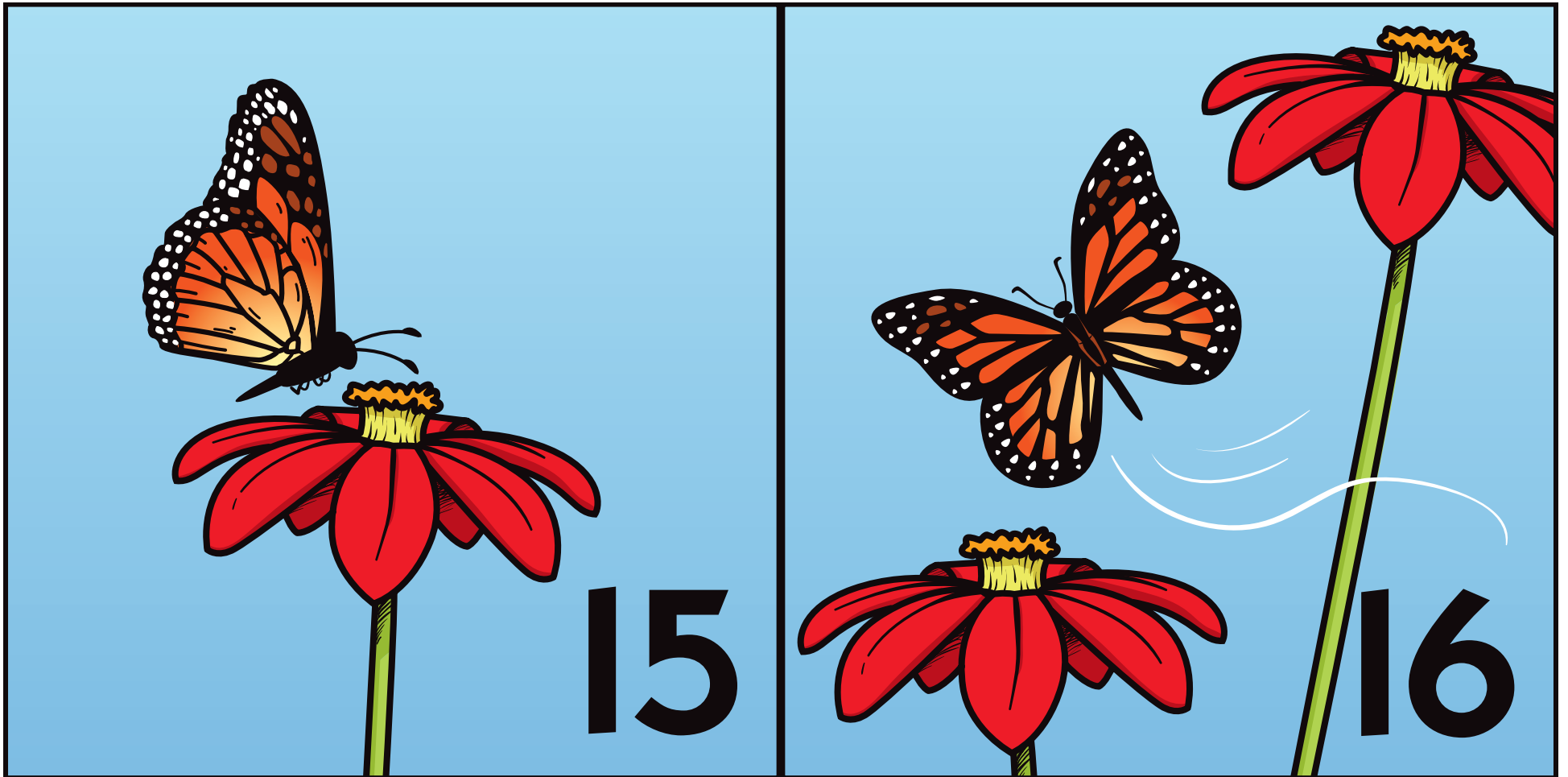
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October Ladybug & Butterfly Calendar Markers Sheet 7 of 16



Print 1 copy of the calendar marker sheets, preferably in color, single-sided, on white cardstock. Cut the calendar markers apart and laminate if desired.

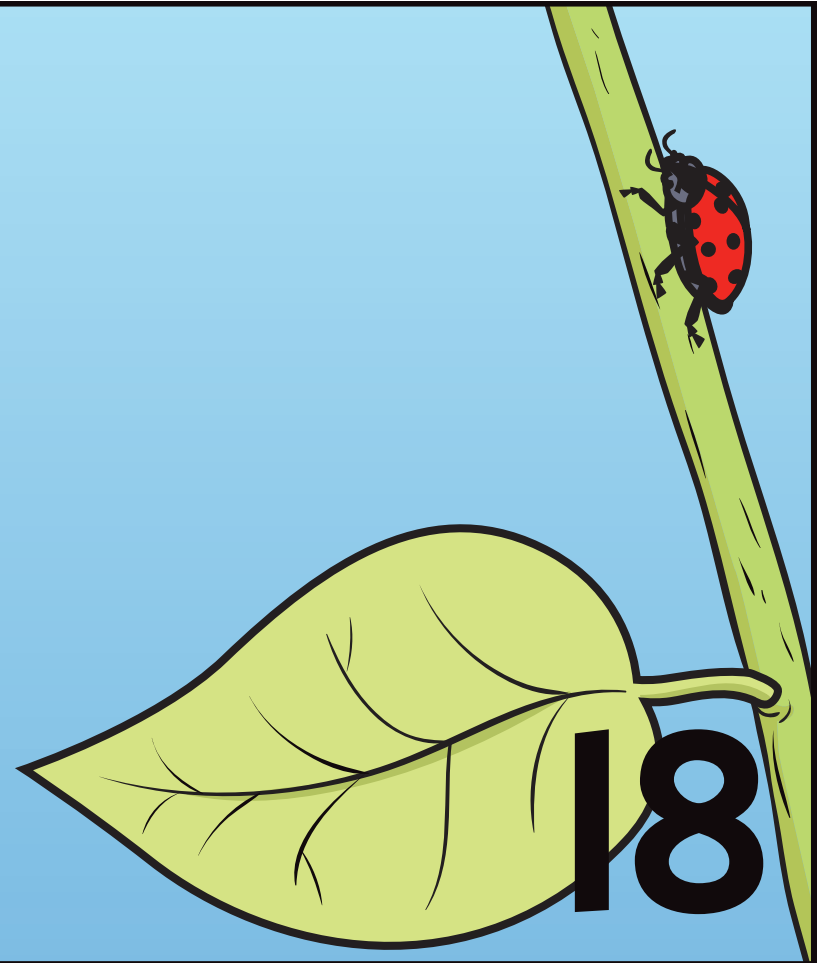
October Ladybug & Butterfly Calendar Markers Sheet 8 of 16



October Ladybug & Butterfly Calendar Markers Sheet 9 of 16

Where is
the
ladybug?

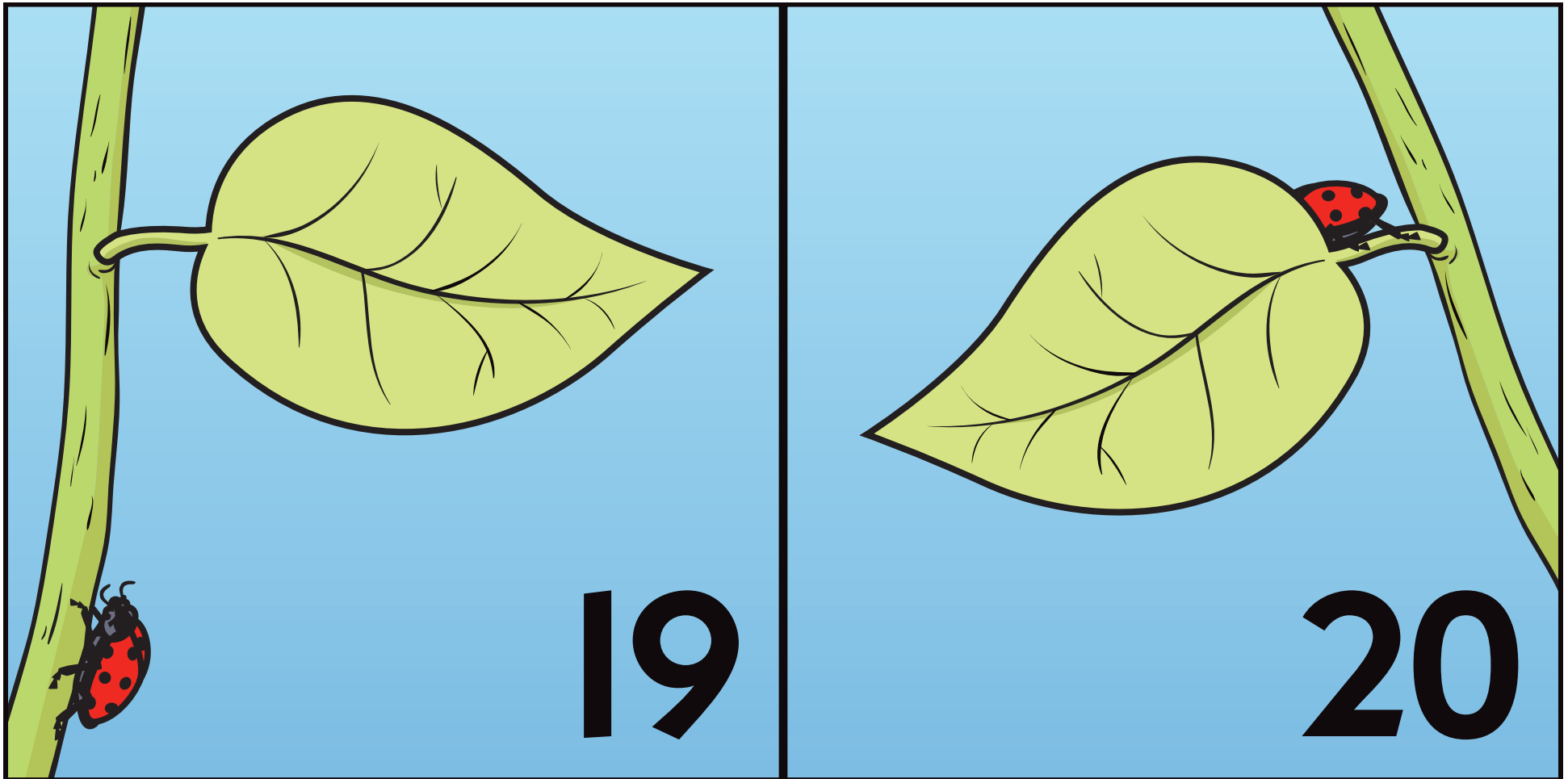
17



18

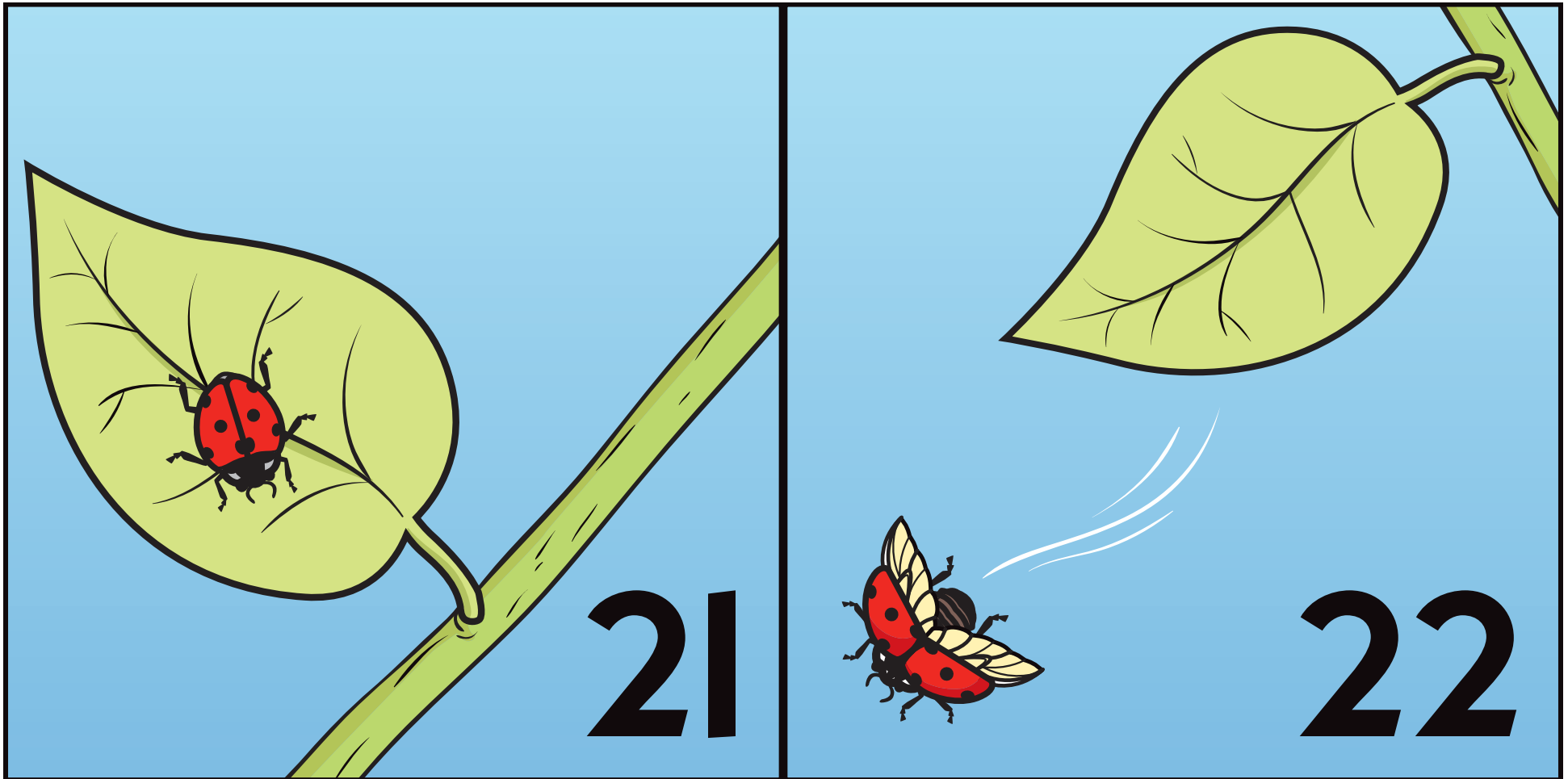
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October Ladybug & Butterfly Calendar Markers Sheet 10 of 16



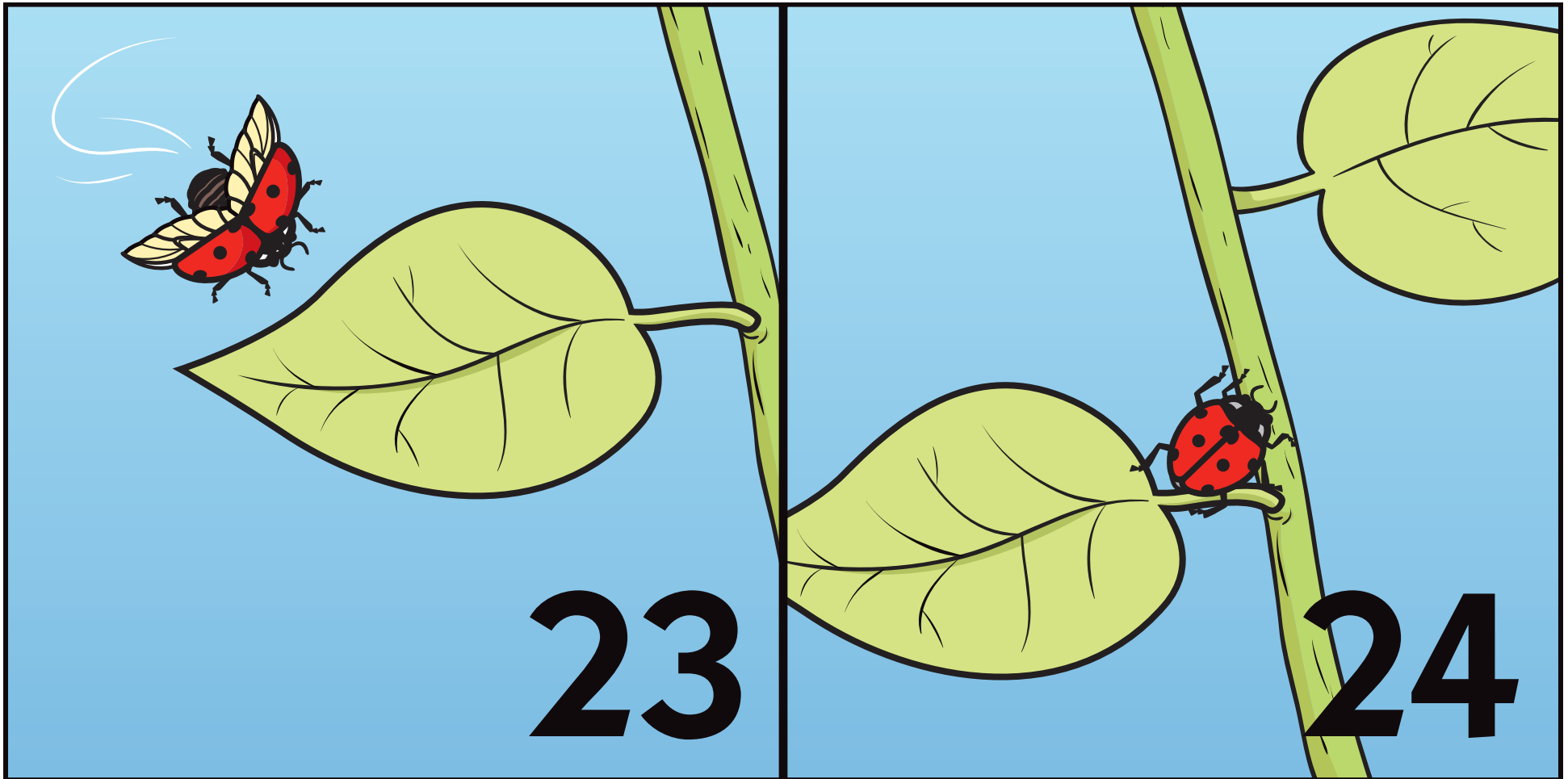
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October Ladybug & Butterfly Calendar Markers Sheet 11 of 16



Print 1 copy of the calendar marker sheets, preferably in color, single-sided, on white cardstock. Cut the calendar markers apart and laminate if desired.

October Ladybug & Butterfly Calendar Markers Sheet 12 of 16



October Ladybug & Butterfly Calendar Markers Sheet 13 of 16

Where is
the
butterfly?

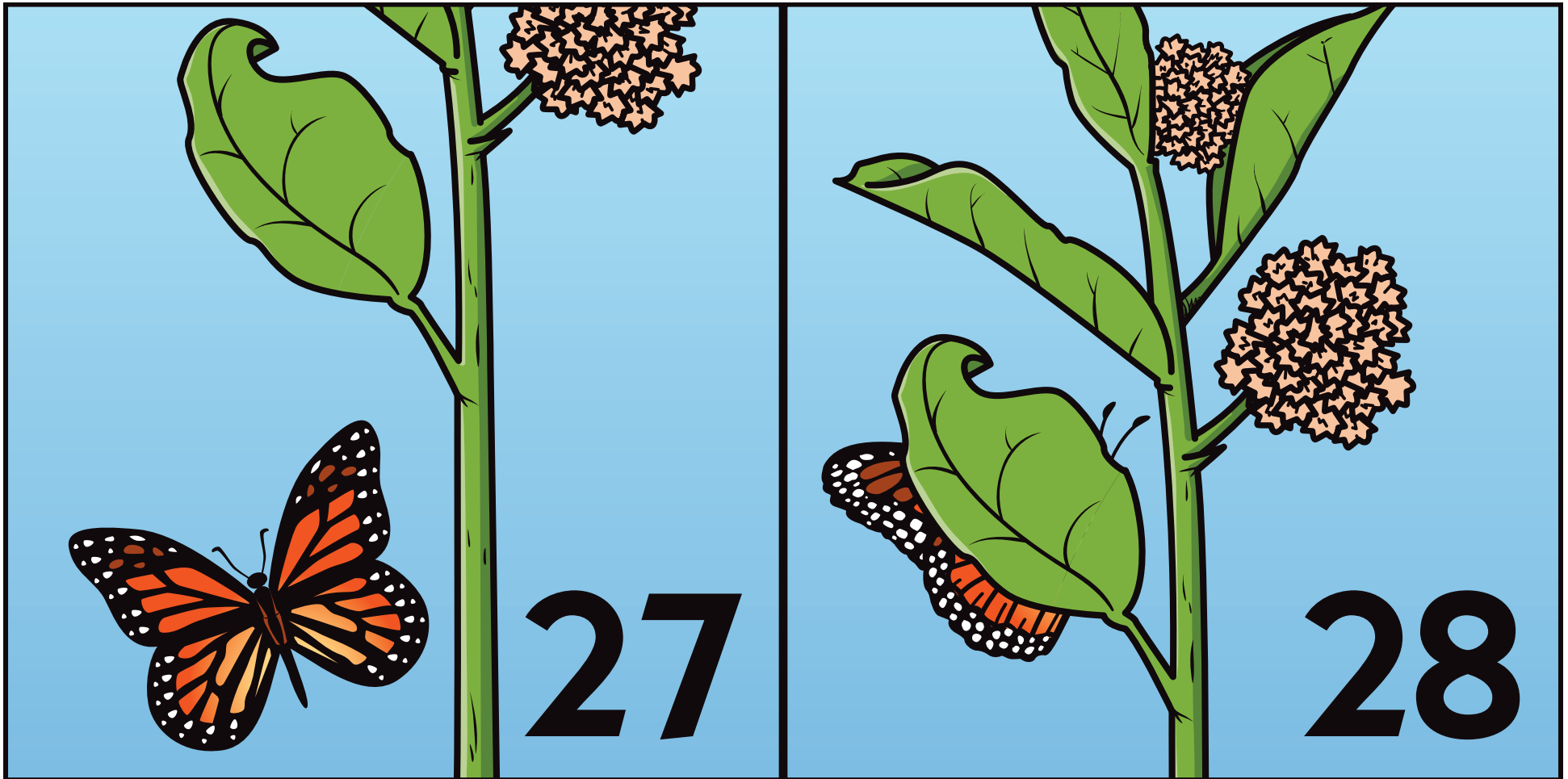
25



26

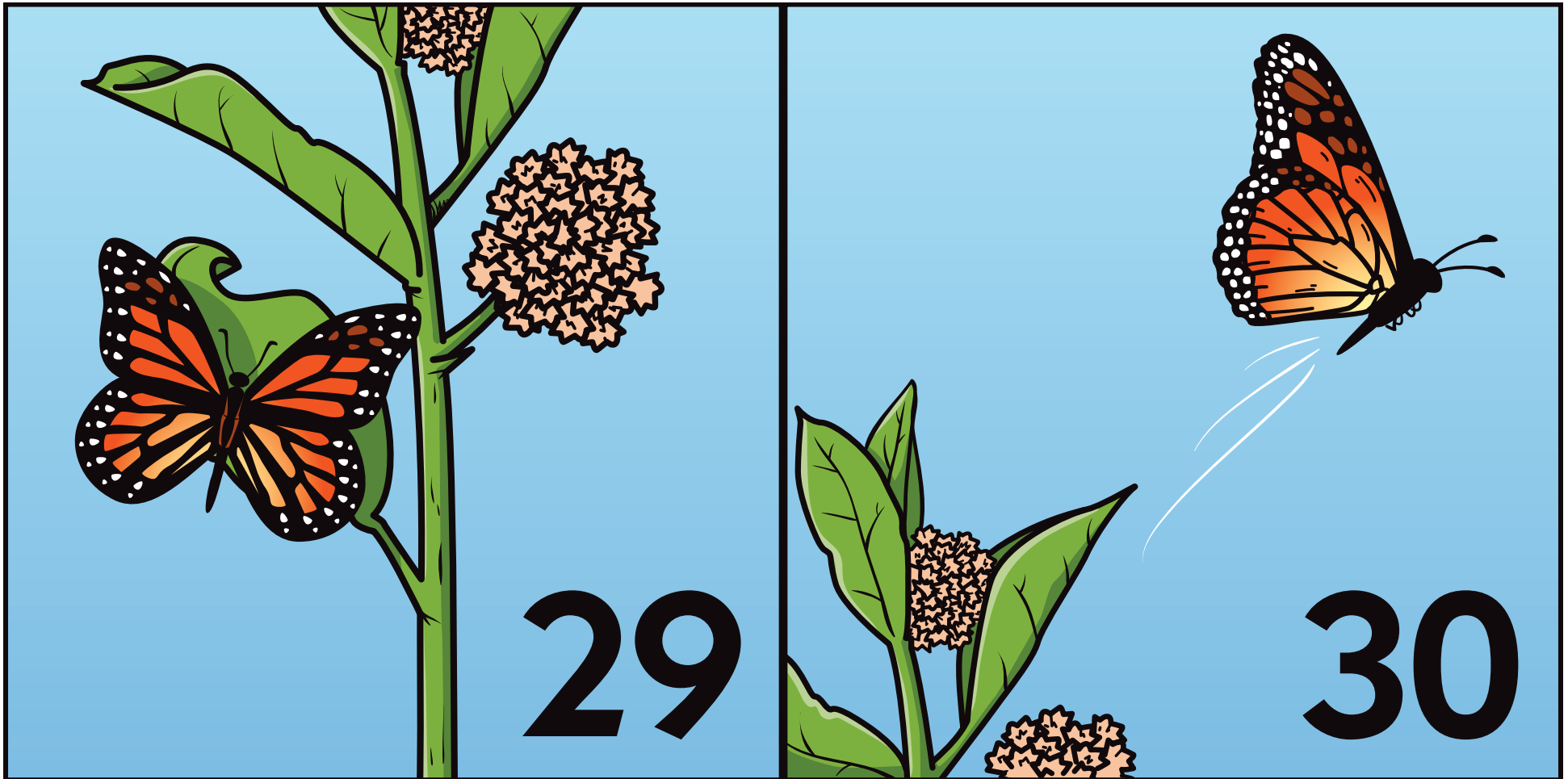
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October Ladybug & Butterfly Calendar Markers Sheet 14 of 16



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October Ladybug & Butterfly Calendar Markers Sheet 15 of 16



Print 1 copy of the calendar marker sheets, preferably in color, single-sided, on white cardstock. Cut the calendar markers apart and laminate if desired..

October Ladybug & Butterfly Calendar Markers Sheet 16 of 16

