

The Bug Day Out

A book about numbers eleven to sixteen







Aim

The Bug Day Out introduces the numbers 11 to 16 and shows students that every teen number is made of one ten and some ones.

These whole-class activities provide students with the opportunity to:

- listen to a story about the numbers 11 to 16
- review numbers 0 to 10
- act out the story using materials such as ten frames and number mats
- use the *Teaching Tool* to act out the story and match visual, verbal, and written representations of the numbers 11 to 16

Activities

1. Listening to the story
2. Reviewing 0 to 10 and representing 11 to 16
3. Acting out the story
4. Using materials to act out the story 1
5. Using the teaching tool to act out the story 
6. Using materials to act out the story 2
7. Using materials to count on from 10
8. Matching number name and numeral cards
9. Using the teaching tool to represent 11 to 16 
10. Using the teaching tool to identify 11 to 16 
11. Using the teaching tool to find missing addends 

1. Listening to the story

Resources

- *The Bug Day Out*

Activity

Show the cover of *The Bug Day Out* to the students and read the title aloud. Encourage volunteers to predict what they think the story might be about. Slowly read the story. Then ask, **What happened in the story? What did you see in each picture? Have you ever been to a fun park with your friends? How many friends went with you?** Reread pages 4–5 of the story and have the students describe the number of bugs on the ride.

Next, discuss the arrangement of the bugs on the ride. Encourage students to explain that the first group of bugs are arranged in a group of 10. Point to the group of 10 and ask, **How many in this group?** Next, point to the group of six in the second carriage and ask, **How many in this group?** Then say, **10 and 6 more.** Repeat for the remaining double-page spreads in *The Bug Day Out*.

2. Reviewing 0 to 10 and representing 11 to 16

Activity

Review how to show the numbers from 0 to 10 to an audience using fingers, starting with the little finger of the right hand (so that the fingers still down show how much more to make 10). Invite a student to come to the front of the class and show six fingers. Repeat for the numbers 1, 5, 7, 3, 10, 4, and 8. When 8 is shown, ask, **How many more are needed to make ten? How do you know?** Discuss the students' thinking, then ask, **Who can come out and show us eleven fingers?**

Students may make some clever attempts to do it on their own. Persist until a student says that it can be done with a partner. Ensure that the student who is showing 1 stands to the audience's right of the student showing 10. Ask the students how they know there are 11 fingers. Some may count all the fingers. If necessary, guide the students by saying, **It's ten and one more.** Repeat for the numbers 12, 13, 14, 15, and 16.



3. Acting out the story

Resources

- *The Bug Day Out*
- String

Preparation

Use the string or chalk to create a large circle on the classroom floor.

Activity

Read pages 4–5 of *The Bug Day Out*. Select a volunteer to identify the total number of ladybugs in the double-page spread (16). Ask, **How many ladybugs are sitting in the first carriage of the ride?** (10.) Invite 10 students to stand within the marked circle to represent this number. Then ask, **How many ladybugs are sitting in the second carriage of the ride?** (6.) Invite 6 more students to stand just outside the circle. Now point to the students standing within the circle and ask, **How many are there in this group?** Next, point to the group of 6 and ask, **How many in this group?** Then say, **Ten and six more**. Reinforce this statement by pointing at the group inside the circle and saying, **10** then at each individual outside the circle as you count, **11, 12, 13, 14, 15, 16. Ten and six more is sixteen**. Repeat the activity for pages 6–7.

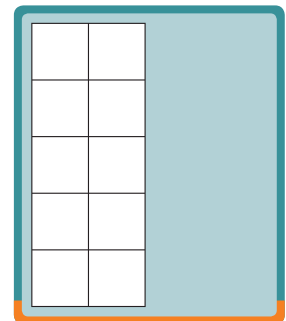
4. Using materials to act out the story

Resources

- *The Bug Day Out*
- *The Number Case* Year K
- Transparent counters

Preparation

Each pair of students will need a ten-frame from *The Number Case* and 16 counters.



Activity

Reread pages 4–5 of *The Bug Day Out* and have the students work in pairs to place a counter on their ten-frame for each bug in the illustration. When students have filled their ten-frame, have them put six counters beside the frame. Point to one pair's ten-frame and ask, **How many in this group?** Next, point to the counters beside the ten-frame and ask, **How many in this group?** Then say, **Ten and six more. Ten and six more is sixteen**. Repeat for the remaining double-page spreads in the book.



5. Using the teaching tool to act out the story



Resources

- *Teaching Tool*
- *The Bug Day Out*

Activity

Ensure that all students can see the *Teaching Tool*. Read pages 4–5 of *The Bug Day Out*. Ask, **How many ladybugs are there on the water slide?** Invite a volunteer to use the *Teaching Tool* to represent the 16 ladybugs depicted in the double-page picture. Have the student click and drag the first 10 bugs into the ten-frame on the left. The remaining bugs should then be placed in the second ten-frame. Once the student has represented the number, point to the two ten-frames and say, **Describe the number of bugs.** A confident individual may say 'Sixteen' or 'Ten and six'. Then say, **Ten and six is sixteen.** Repeat the activity for other double-page pictures in the story.

6. Using materials to act out the story 2

Resources

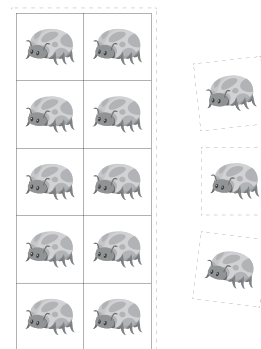
- *The Bug Day Out*
- Support 1 – see attached
- Scissors
- Glue
- Sheets of paper

Preparation

Print three copies of Support 1 for each group of 3 to 4 students.

Activity

Project or show Support 1 and ask, **How could we use these bugs to show the number 13?** Encourage a confident volunteer to explain that you could cut out the group of ten and add three singles as shown right. Have each group select three scenes from the storybook and show the matching picture by cutting out the matching number of bugs and pasting them onto a plain sheet of paper. Then select volunteers to describe their group's picture to the class.



7. Using materials to count on from 10

Resources

- *The Number Case* Year K
- Resealable plastic bags
- Transparent counters

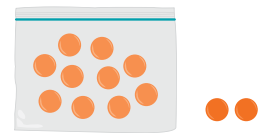
Preparation

Select the number name cards for 11 to 16 from *The Number Case*. Each pair of students will need one snap-lock bag and 16 counters. Write 10 on each snap-lock bag.

Activity

Have each pair of students place ten counters in their bag. Ask, **How many counters are in the bag?** Display a number name card and challenge the students to show that number using their single counters and bag of 10.

Repeat for all numbers 11 to 16. One example is shown right.



8. Matching number name and numeral cards

Resources

- Support 2 and 3 – see attached
- Scissors
- Transparent counters

Preparation

Print a copy of Support 2 and 3 for each pair of students.

Activity

Ask each pair of students to cut out their numeral and number name cards. Have one student in each pair show a numeral card and the other student then find the matching number name card. To extend the activity, provide each student with 20 counters and have them take turns to show a matching quantity of counters for each pair of cards.



9. Using the teaching tool to represent 11 to 16



Resources

- *Teaching Tool*

Activity

Ensure that all students can see the *Teaching Tool*. Write a number between 11 and 16 on the *Teaching Tool* (e.g. 12). Select a volunteer to say the number and then represent the number by clicking and dragging the first ten bugs into the ten-frame on the left. Once the student has represented the number, point to the ten-frame on the left and ask, **How many in this group?** Point to the bugs in the ten-frame on the right and ask, **How many are in this group?** Then guide the students to say how the number is composed, **Ten and two is twelve**. Repeat for the remaining numbers from 11 to 16.

10. Using the teaching tool to identify 11 to 16



Resources

- *Teaching Tool*

Activity

Ensure that all students can see the *Teaching Tool*. Invite a volunteer to represent a number between 11 and 16 on the *Teaching Tool*. Ensure that the first ten bugs are placed in the ten-frame on the left. Next, invite another member of the class to say the matching number. When saying the number, encourage the volunteer to identify the group of ten and the number of bugs next to the ten. Finally, assist the student to write the numeral in the white panel of the *Teaching Tool*. Repeat for all numbers 11 to 16.



II. Using the teaching tool to find missing addends



Resources

- *Teaching Tool*
- *The Number Case* Year K

Preparation:

Select the numeral cards for 1 to 16 from *The Number Case*.

Activity

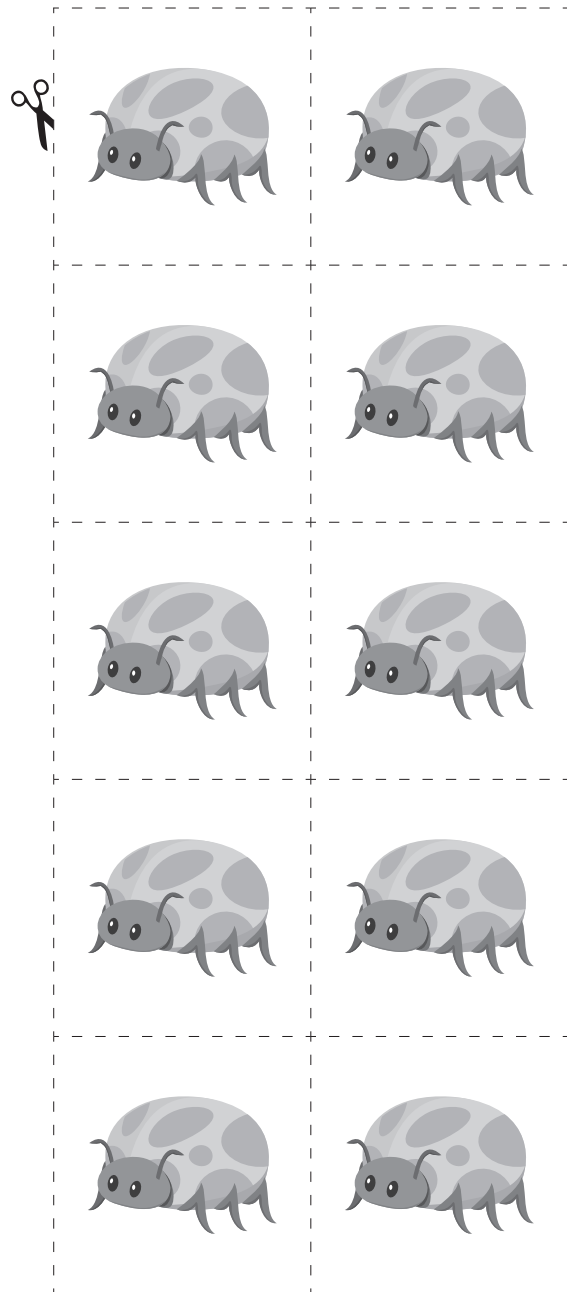
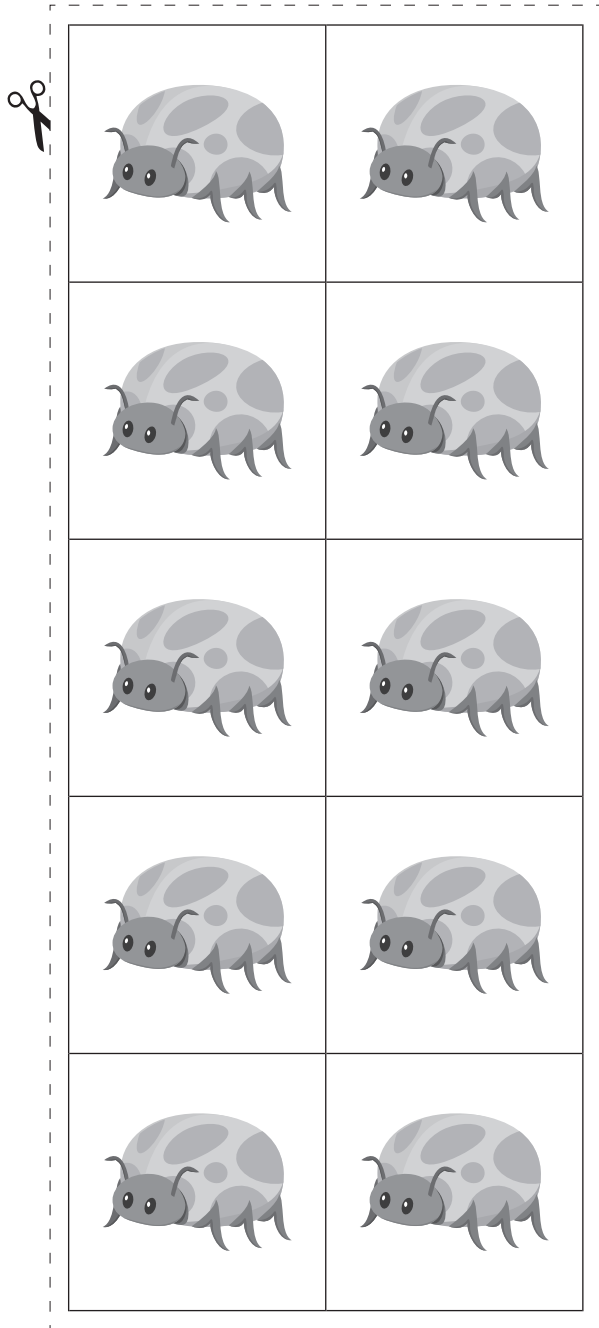
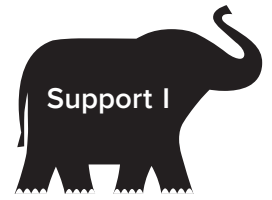
Ensure that all students can see the *Teaching Tool*. Use the numeral cards to show the following on the board:

$$\boxed{10} \quad \text{and} \quad \underline{\quad\quad} \quad \text{is} \quad \boxed{14}$$

Read the sentence with the students. Then challenge them to use the *Teaching Tool* to figure out the missing addend. If students are having difficulty, drag ten bugs into the ten-frame on the left and ask, **How many more bugs do I need to make fourteen?** Repeat for the remaining numbers from 11 to 16.



Bug Cards



Number Name Cards



one	two	three	four
five	six	seven	eight
nine	ten	eleven	twelve
thirteen	fourteen	fifteen	sixteen
seventeen	eighteen	nineteen	twenty



	1	2	3	4
	5	<u>6</u>	7	8
	<u>9</u>	10	11	12
	13	14	15	16
	17	18	19	20