

Bears on Buses

A book about active addition






Aim

Problem solving situations are often described as either active or static. *Bears on Buses* introduces active addition as bears join a group already on the bus. This story also presents an opportunity to explore the relationship between addition and subtraction by reversing the process.

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

- listen to a story about active addition
- use materials and pictures to act out the story
- write addition facts
- write related addition and subtraction facts

Activities

1. Listening to the story
2. Using materials to act out the story 1
3. Using materials to act out the story 2
4. Using the teaching tool to act out the story 
5. Working with the turnaround idea for addition
6. Using the teaching tool to write addition facts 
7. Using the teaching tool to identify missing addends 
8. Relating addition and subtraction
9. Writing related addition and subtraction facts

1. Listening to the story

Resources

- *Bears on Buses*

Activity

Show the cover of *Bears on Buses* to 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?** Bring out that in each picture spread there were two groups of bears: those already on the bus, and those getting on the bus. Read the story again and at the conclusion of each picture spread ask, **How many bears are on the bus? How many bears are getting on the bus? How many bears in total?**

2. Using materials to act out the story

Resources

- *Bears on Buses*
- 10 classroom chairs

Activity

Place ten chairs in a row at the front of the classroom. Tell the students that they are going to act out *Bears on Buses* and that the chairs represent seats on the bus. Read pages 6–7 of the story and invite a student to describe the situation. Then have the student choose more students to come to the front and sit on the chairs (two students will be joined by three more students to make the total of five). Repeat for the remaining pages of *Bears on Buses*.



3. Using materials to act out the story 2

Resources

- *Bears on Buses*
- Support 1 – see attached
- Counters

Preparation

Print a copy of Support 1 for each student. Each student will also need ten counters.

Activity

Read pages 6–7 of *Bears on Buses* and encourage students to describe the situation. Ask, **What happened? What did you see?** Have the students represent the situation with the counters on their bus picture. For pages 6–7, the students place two counters in the bus to represent the bears already seated on the bus then add another three counters to represent the bears getting on the bus. Ask, **How many bears are on the bus? How many bears are getting on the bus? How many bears in total? What number sentence can we write to match this situation?** Invite a student to write $2 + 3 = 5$ on the board. Repeat for the remaining pages of *Bears on Buses*.

4. Using the teaching tool to act out the story



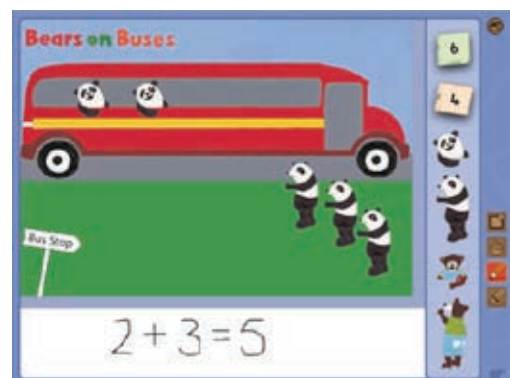
Resources

- *Teaching Tool*
- *Bears on Buses*

Activity

Ensure that all the students can see the *Teaching Tool*. Read pages 6–7 of the story and select a volunteer to describe the situation. As the student describes the picture spread, have another volunteer drag two bears onto the bus in the work area and then place three bears beside the bus to represent those getting on the bus.

Ask, **What number sentence can we write to describe this situation?** Have another student use the writing tool to write the addition number sentence in the white panel at the base of the screen. Reset the *Teaching Tool* and repeat for the remaining pages of *Bears on Buses*.



5. Working with the turnaround idea for addition

Resources

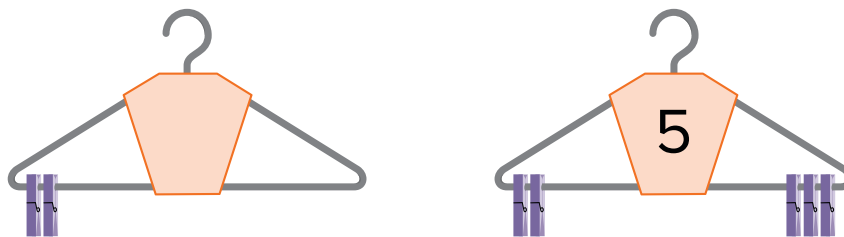
- *Bears on Buses*
- Support 2 – see attached
- 5 wire coathangers
- Clothes pegs
- Large felt marker

Preparation

Print five copies of Support 2 and cut out the coathanger collars. Attach each collar to a wire coathanger.

Activity

Read pages 6–7 of *Bears on Buses*. Ask, **How many bears are already on the bus?** Invite a confident to provide the answer and model the scenario by attaching two clothes pegs to one side of the coathanger as shown below.



Ask, **How many bears are getting on the bus?** Invite a volunteer to give the answer and place three pegs on the other side of the coathanger as shown above right. Next ask, **How many bears are there in total?** Select a confident volunteer to say the answer and then write it on the coathanger collar. Have the students write the matching addition fact. Next, turn the coathanger around and ask, **What addition fact can we write now? What is the same? What is different?** Compare and contrast the facts that have been written. Repeat for the remaining pages of *Bears on Buses*.



6. Using the teaching tool to write addition facts

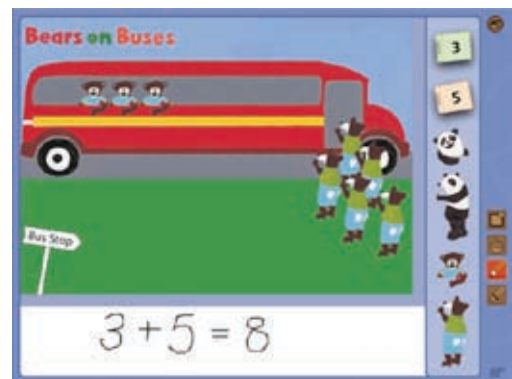


Resources

- *Teaching Tool*

Activity

Ensure that all the students can see the *Teaching Tool*. Show the students the two number cubes. Explain that one represents the number of bears on the bus and the other represents the number of bears that are getting on. Invite one volunteer to the front of the class and have them click the first cube and then drag the matching number of bears onto the bus in the work area. Then invite another volunteer to click the second cube and drag that number of bears to show the number of bears that are getting on the bus. Ask, **How many bears are there in total?** Select a student to write the matching addition fact in the white panel at the base of the screen. Reset the *Teaching Tool* and repeat as time allows.



7. Using the teaching tool to identify missing addends

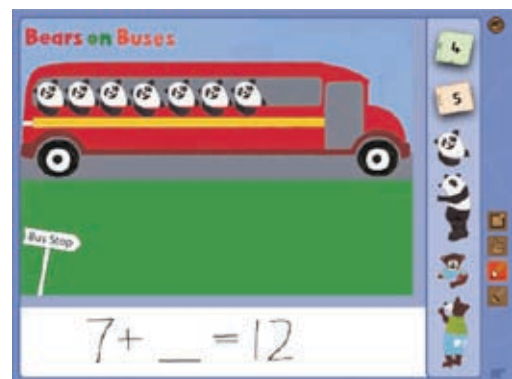


Resources

- *Teaching Tool*

Activity

Ensure that all the students can see the *Teaching Tool*. Click and drag seven bears onto the bus in the work area. Next, write a relevant missing-addend number sentence in the white panel at the base of the screen, for example, $7 + \underline{\quad} = 12$. Point to each number in the number sentence and ask, **What does this number mean?** Bring out the fact that the two parts (one of which is missing) must equal the number of bears in total. Ask, **If there are already 7 bears on the bus, how many bears do we need to add to make 12 bears in total?** Invite a volunteer to drag five bears onto the work area and complete the number sentence. Repeat as time allows.



8. Relating addition and subtraction

Resources

- *Bears on Buses*

Activity

Read pages 8–9 of *Bears on Buses*. Write $___ + ___ = ___$ on the board. Invite a volunteer to describe the situation and complete the matching addition fact. Then say, **There are now six bears on this bus. If the two bears got off the bus at the next stop, what number sentence can we write to show this?** Invite a volunteer to describe and then write the related subtraction fact on the board. Repeat for the remaining pages of the book.

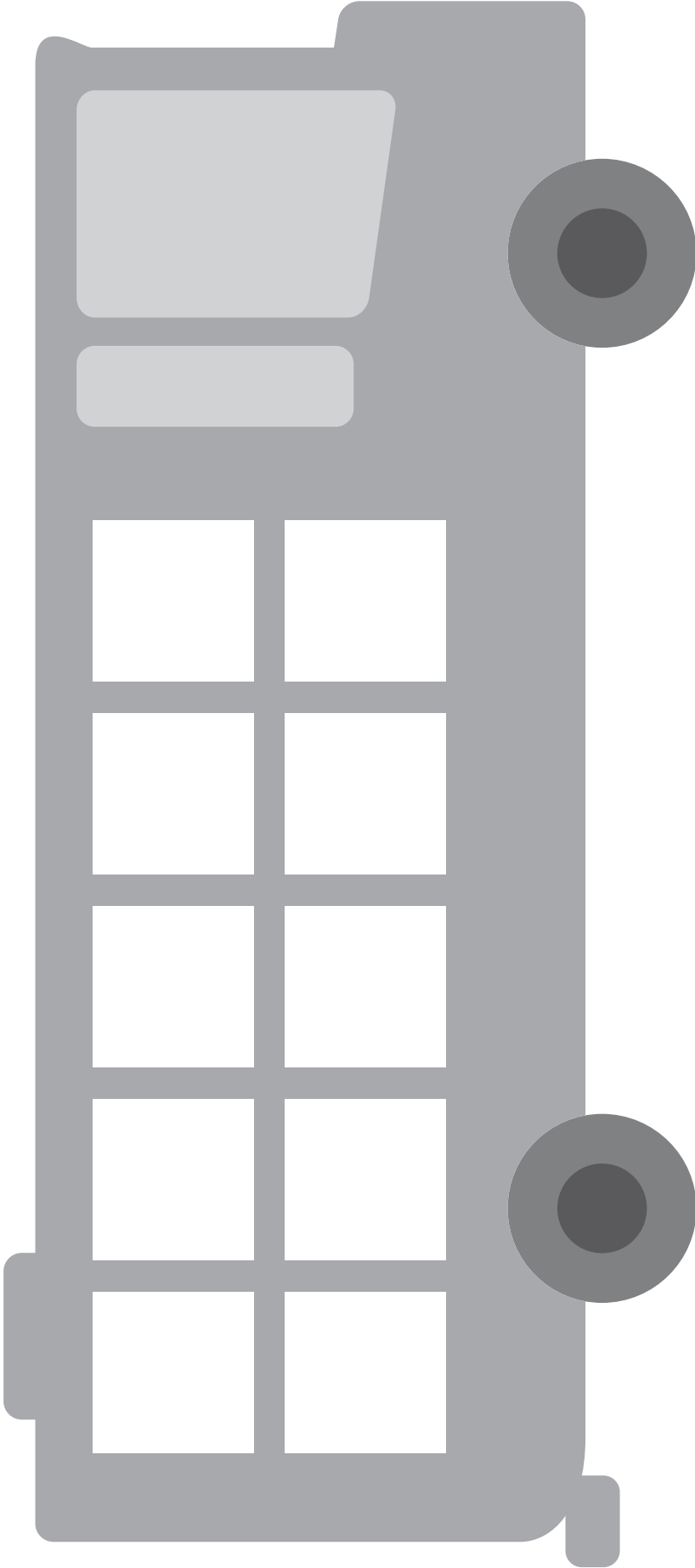
9. Writing related addition and subtraction facts

Activity

Invite a volunteer to write an addition fact on the board. Ask, **Who can write the turnaround addition fact?** Guide a volunteer to write the turnaround addition fact on the board below the first fact. Next ask, **What are the two parts? What is the total? What subtraction fact can we make using these numbers?** Invite a volunteer to write one related subtraction fact on the board. Ask, **Is there a different subtraction fact that can be made?** Invite a confident volunteer to write the second related subtraction fact. Repeat starting with different addition facts.



Bus Counting Mat



Coathanger Collar

