

# A Bear's Share

A book about division (sharing)








## Aim

Two different models can be used to represent division: partition (sharing) and quotient (measurement). *A Bear's Share* introduces the partition model for division.

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

- listen to a story about splitting a dividend into equal groups
- use materials to act out sharing situations
- use the *Teaching Tool* to act out sharing situations
- split a dividend between a different number of divisors
- find division number facts
- write a story about sharing into equal groups

## Activities

1. Listening to the story
2. Using materials to act out the story
3. Using the teaching tool to act out the story 
4. Using the teaching tool to change the dividend 
5. Using the teaching tool to change the divisor 
6. Introducing "divided by"
7. Writing division sentences
8. Using the teaching tool to write division sentences 
9. Using the teaching tool to find the missing dividend 
10. Writing a story about sharing into equal groups

# 1. Listening to the story

## Resources

- *A Bear's Share*

## Activity

Show the cover of *A Bear's Share* to students and read the title aloud. Encourage volunteers to predict what they think the story might be about. Read the story in its entirety without discussion. Then ask, **What happened in the story? What did you see in each picture?**

Encourage students to explain that the bears were trying to share a tray of muffins into three equal groups. Read the story again. However, this time allow the students to count the total number of muffins that need to be shared among the three bears. At the end of each picture spread ask, **Have the muffins been shared equally? Which bear has more? Which bear has less?**

# 2. Using materials to act out the story

## Resources

- *A Bear's Share*
- Support 1 – see attached
- Base-10 ones blocks

## Preparation

Print a copy of Support 1 for each student. Each student will also need 24 base-10 ones blocks.

## Activity

Ask the students to place 24 blocks in the large region at the top of their sharing mat. Tell the students that this area represents the total number of muffins. Next, point to the three smaller regions below and say, **Imagine these are the bears' plates.** Read pages 8–9 of the story and invite a volunteer to identify the number of muffins on each bear's plate. Have the students act out the sharing by moving the blocks on their sharing mat. Ask, **Have the muffins been shared equally? Which bear has more? Which bear has less?** Have the students return all 24 blocks to the top of their sharing mat and repeat for pages 10–11 and 12–13 of the story. For pages 12–13, encourage students to explain that each bear has the same number of muffins and that there are no muffins left over. Ensure the students understand that this means the muffins have been shared equally. Ask the students to identify the number of muffins that each bear received before saying, **24 shared equally by 3 is 8 each.**



### 3. Using the teaching tool to act out the story

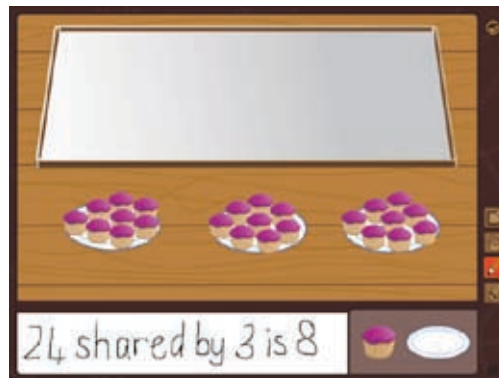


#### Resources

- *Teaching Tool*
- *A Bear's Share*

#### Activity

Ensure that all the students can see the *Teaching Tool*. Read pages 6–7 of *A Bear's Share*. Ask the students to count the total number of muffins. Select a volunteer to drag this number of muffins onto the large tray in the work area. Then ask, **How many bears are there?** Have a volunteer drag three plates onto the work area and position them below the large tray. Read pages 8–13 of *A Bear's Share*. Have the students act out each scenario by dragging the matching number of muffins onto the three plates. For each instance, ask, **Does each bear have the same number of muffins? Have the muffins been shared equally?** When the muffins have been shared equally among the bears use the writing tool to write **24 shared by 3 is 8 each** in the white panel at the base of the screen.



### 4. Using the teaching tool to change the dividend



#### Resources

- *Teaching Tool*

#### Activity

Ensure that all the students can see the *Teaching Tool*. Select a volunteer to drag 15 muffins onto the large tray in the work area and another volunteer to drag three plates onto the table in the work area. Ask, **How will we share this number equally among three?** Invite a volunteer to model the sharing by moving the muffins onto the plates. When the muffins have been shared equally onto the plates, use the writing tool to record **15 shared by 3 is 5 each** in the white panel at the base of the screen. Reset the *Teaching Tool* and repeat the activity starting with other multiples of three such as 12, 21, and 18.



## 5. Using the teaching tool to change the divisor



### Resources:

- *Teaching Tool*
- *A Bear's Share*

### Activity

Ensure that all the students can see the *Teaching Tool*. Read pages 14–17 of *A Bear's Share*. Invite a volunteer to drag 24 muffins onto the large tray in the work area. Ask, **How many bears are sharing the muffins?** Encourage students to explain that the 24 muffins have to be shared equally among four bears. Ask, **How will we show this on the *Teaching Tool*?** Invite a confident volunteer to explain that four plates will be needed and have them drag the plates onto the table in the work area. Next, select a volunteer to share the 24 muffins evenly among the four plates. Have another student record the sharing **24 shared by 4 is 6 each** in the white panel at the base of the screen. Reset the *Teaching Tool* and repeat the activity starting with other multiples of four such as 16, 20, and 32.

## 6. Introducing “divided by”

### Resources

- *A Bear's Share*

### Activity

Read *A Bear's Share*. Ask, **What were the bears trying to do?** Guide a volunteer to explain that the bears were trying to share a tray of muffins into three equal groups. Write **24 shared by 3** on the board. Ask, **Does anyone know another word for share?** Write **24 divided by 3** on the board. Discuss both of the terms. Explain that both terms involve splitting a number into smaller, equal parts.



## 7. Writing division sentences

### Resources

- Counters

### Preparation

Each group of students will need 30 counters.

### Activity

Have the students in each group use their counters to help create division situations. Ask them to write the division number fact to match each situation. Guide the students to see that for each division number fact they can write a related division number fact by swapping the divisor (the number of groups) and the quotient (the number in each group). Have the students record as many different division number sentences as possible. Afterward, have each group present their division number facts to the class.

## 8. Using the teaching tool to write division sentences



### Resources

- *Teaching Tool*

### Activity

Ensure that all the students can see the *Teaching Tool*. Drag 24 muffins onto the large tray and two plates onto the table in the work area. Ask, **How will we divide 24 muffins between 2 bears?** Invite a confident volunteer to share the muffins into equal groups of 12. Write the matching division sentence ***24 divided by 2 is 12*** on the board and have the students copy it. Reset the *Teaching Tool* and repeat the activity for dividing by 3, 4, 6, 8, and 12. After each scenario, write the matching division sentence on the board and have the students copy it. Afterward, discuss the division sentences. Ask, **What do you notice about the numbers?** Bring out that the number on each plate decreases as the number of plates increases.

*24 divided by 2 is 12*

*24 divided by 3 is 8*

*24 divided by 4 is 6*

*24 divided by 6 is 4*

*24 divided by 8 is 3*

*24 divided by 12 is 2*



## 9. Using the teaching tool to find the missing dividend



### Resources

- *Teaching Tool*

### Activity

Ensure that all the students can see the *Teaching Tool*. Click and drag three plates onto the table in the work area and then drag three muffins onto each plate. Challenge the students to write the division sentence to match: **9 divided by 3 is 3**. If students are having difficulty ask, **What do we know? What do we need to know?** Encourage students to explain that we know the number of groups and the number in each group, and what we need to know is the total. Repeat the activity starting with other groups, for example four plates with two muffins, or three plates with four muffins.

## 10. Writing a story about sharing into equal groups

### Resources

- *A Bear's Share*
- Sheets of paper
- Crayons

### Preparation

Each student will need a sheet of paper and crayons.

### Activity

Read *A Bear's Share* and discuss sharing. Ask, **Have you ever shared something with your friends or family?** Invite volunteers to tell sharing stories, for example, 'I had 32 chocolates. I shared them with my family of 4 people and everyone got 8 chocolates.' Challenge the students to write a sharing story and to illustrate the equal groups. Then invite volunteers to read their story to the class to discuss the sharing. At the end of the lesson, collect the stories and collate them into a classroom book about division.



# Sharing Mat

