

The Pirates' Gold

A book about division (sharing)







Aim

The Pirates' Gold explores the different ways to partition a quantity into equal groups. Students learn to partition a quantity into equal groups and interpret an amount that is left over.

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

- listen to a story about partition division
- use concrete materials to partition a quantity into equal groups
- use the *Teaching Tool* to partition a quantity into equal groups
- explore different ways to partition the same quantity
- write related division sentences using the language “divided by”
- identify and work with an amount left over

Activities

1. Listening to the story
2. Acting out the story
3. Using materials to act out the story
4. Using the teaching tool to act out the story 
5. Using the teaching tool to investigate other sharing scenarios 
6. Introducing “divided by”
7. Writing division sentences
8. Introducing the remainder 
9. Creating sharing situations that leave a remainder 

I. Listening to the story

Resources

- *The Pirates' Gold*

Activity

Show the cover of *The Pirates' Gold* and read the title aloud. Encourage students to predict what the story might be about. Read the story without discussion. Read the story again and ask, **What happened in the story?** Encourage students to explain that a quantity of gold was shared evenly between a different numbers of pirates. Slowly re-read the story and discuss each double-page spread. Ask, **How many pieces of gold will each pirate get?** Encourage students to partition the array to figure out the number of gold pieces in each equal share. Highlight that as the number of pirates increased, they each received fewer gold pieces.

2. Acting out the story

Resources

- *The Pirates' Gold*
- 24 counters or cubes in a box

Activity

Read *The Pirates' Gold* and after each double-page spread invite a volunteer to come to the front and act as the pirate claiming their treasure. The remaining students should confirm that each pirate is receiving the correct amount of gold. Encourage one "greedy" pirate to intentionally mislead the other pirates. Ask, **Is the pirate sharing the gold fairly? How do you know?** Repeat for each double-page spread of the storybook. Highlight that as the number of pirates increases, they each received fewer gold pieces.



3. Using materials to act out the story

Resources

- *The Pirates' Gold*
- Support 1 (see attached)
- 24 base-10 ones blocks for each group of students

Preparation

Make a copy of Support 1 for each group of students.

Activity

Ask each group to place all their blocks in the large box on the sharing mat (Support 1). Inform students that each block represents one piece of gold. Read pages 6–7 of *The Pirates' Gold* and establish that the first pirate will receive all 24 pieces. Now read pages 8–9 of the storybook and have the students partition the 24 blocks evenly between two of the smaller boxes. Ask, **How many pieces of gold will each pirate receive?** Repeat for each double-page spread in the storybook.

4. Using the teaching tool to act out the story



Resources

- *The Pirates' Gold*
- *Teaching Tool*

Activity

Make sure all the students can see the *Teaching Tool*. Click and drag 24 pieces of gold onto the treasure chest in the work area. Read pages 8–9 of *The Pirates' Gold* and invite a confident volunteer to use the *Teaching Tool* and evenly share the 24 pieces of gold between two pirates. Ask, **How many pieces of gold will each pirate receive? What number sentence can you write to show each share?** Write the matching number sentence in the white panel at the base of the screen. Repeat for each double-page spread in the storybook.



5. Using the teaching tool to investigate other sharing scenarios



Resources

- *The Pirates' Gold*
- *Teaching Tool*

Activity

Make sure all the students can see the *Teaching Tool*. Click and drag 15 pieces of gold onto the treasure chest in the work area. Say, **There are fifteen pieces of gold. How many pirates could evenly share the gold?** Invite a confident volunteer to click and drag pirates onto the work area to show their solution. Use the drawing tool to record the matching number sentence in the white panel at the base of the screen. Ask, **Is there another way to equally share the gold?** Students can then come to the front and share their solutions. Reset the *Teaching Tool* and repeat the activity with other dividends.

6. Introducing “divided by”

Resources

- *The Pirates' Gold*

Activity

Read *The Pirates' Gold* and ask, **What are the pirates doing?** Guide a volunteer to explain that the pirates are sharing a quantity of gold between groups of varying sizes. Write **24 shared by 2** on the board. Ask, **Does anyone know another word for share?** Write **24 divided by 2** on the board. Discuss both of the phrases. Explain that both involve splitting a number into smaller, equal parts.



7. Writing division sentences

Resources

- Support 1 (see attached)
- 30 base-10 ones blocks for each group of students

Preparation

Make one copy of Support 1 for each group of students.

Activity

Have the students in each group use their blocks and sharing mat to 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. Introducing the remainder



Resources

- *Teaching Tool*

Activity

Make sure all the students can see the *Teaching Tool*. Tell a simple sharing story that involves one piece of gold left over, for example, **Three pirates equally share ten pieces of gold.** Select one student to act out the story using the *Teaching Tool*. Ask, **How many pieces of gold will each pirate receive? How many pieces of gold will be left over?** Repeat with other sharing situations that involve a remainder.



9. Creating sharing situations that leave a remainder



Resources

- *Teaching Tool*

Activity

Make sure all the students can see the *Teaching Tool*. Discuss sharing situations that involve one or more coins left over. Ask, **Who can show a sharing situation that leaves one coin left over?** Confident volunteers can then use the *Teaching Tool* to share their solution. Write the division sentence to match each successful solution on the board. Guide the students to explain that several facts can leave one coin left over. Repeat the activity by asking students to show sharing situations that leave two coins left over.





A large vertical rectangular area with a grey background. On the left side, there is a large, empty white rounded rectangle. To its right, there are five smaller, empty white rounded rectangles stacked vertically. Each of these five smaller rectangles is connected to the large left rectangle by a black line that starts from the right edge of the large rectangle and points towards the left edge of the smaller rectangle.