

Kindergarten Module 5

Introduction to Addition and the Braille

Hundreds Chart

Check-Up

Introduction

- All bracketed text should not be read aloud and is for reference only.
- The questions have been numbered in this document to aid teachers and parents. However, the questions are not numbered the same way, if numbered at all, in the student documents.
- It is highly recommended that this check-up be completed across two or more sessions.

Part 1

Part 1 Materials

- Student Braille Document: GK-M5-Check-Up-Student.brf
- Braillewriter
- Braille paper
- Five and ten frames (Alternative: Tactile Five and Ten Frames from American Printing House for the Blind [APH])
- Counting bears placed in a bowl (Alternatives: different objects, Unifix cubes, base ten unit blocks)
- Pennies (Alternatives: APH Tactile Tokens, magnetic counters)
- Work tray (Alternative: cookie sheet)
- Optional: nonslip surface such as a rubber shelf liner or magnetic board to place the five frame and ten frame on
- GK-M5-Check-Up-Data-Table.docx

Part 1 Teacher Note

The five and ten frames are available in braille within the curriculum. The Tactile Tokens from APH fit perfectly into the five and ten frames and the two textures can represent the two addends. You can also use the shapes and line segments from the Picture Maker Wheatley Tactile Diagramming Kit to create the five and ten frames.

Part 1 Teacher Script

You may use your counting bears to help you add the groups in the first two problems.

Question 1.1

One bear sat on the grass in the national park. Two more bears walked out of a cave and sat down on the grass. How many bears are sitting on the grass now?

Question 1.2

Three dogs were walking in the park. Two more dogs have come to the park and are walking in the park. How many dogs are walking in the park now?

Place the counting bears back in the bowl. You will need your five frame, pennies, and work tray for the next three problems.

Question 1.3

Begin by placing 2 pennies on the five frame. How many more pennies are needed to make 5?

Question 1.4

Remove the pennies from the five frame and place them back in the work tray. Now place 4 pennies on the five frame. How many more pennies are needed to make 5?

Question 1.5

Use your five frame and show me 3 different ways to make 5.

This time you will need your ten frame, pennies, and work tray.

Question 1.6

Use your ten frame and show me 4 different ways to make 10.

Question 1.7

Let's move to the braille document now. There is just one symbol on the third line of braille. It is on the left side of the page.

[dots 4-5-6, dots 1-4-6]

⠠⠠

You should remember from the module that this is called an opening Nemeth Code indicator. It tells us that we are going to read math or science. Dots 4-5-6 are in the first cell, and dots 1-4-6 are in the second cell.

Find the plus sign in the fourth line of braille.

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Question 1.8

Find the equals sign in the fifth line of braille.

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Question 1.9

Now read the equations on the remaining five lines of braille on the page.

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⠠⠠ ⠠⠠ ⠠⠠

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⠠⠠⠠⠠ ⠠⠠ ⠠⠠

⠠⠠⠠⠠ ⠠⠠ ⠠⠠

Question 1.10

Turn to page 2, and let's try some more!

[Make sure the student is viewing the first five lines of braille on page 2.]

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⠠⠠ ⠠⠠ ⠠⠠⠠⠠

Question 1.11

Now move your hands to the next line of braille. Then read the equations and tell me what number the general omission symbol stands for each time.

[Make sure the student is viewing the last five lines of braille on page 2.]

Question 1.12

Turn to page 3 and let's try reading five more problems!

Part 2

Part 2 Materials

- Student Braille Document: GK-M5-Check-Up-Student.brf
- Braillewriter
- Braille paper
- GK-M5-Check-Up-Data-Table.docx

Part 2 Teacher Script

Listen and then braille what you hear. Don't forget to number your problems. Let me know if you need for me to repeat what you should braille.

Question 2.1

1. equals sign

Question 2.2

2. plus sign

Question 2.3

3. general omission symbol

Question 2.4

4. 11, 12, 13

Question 2.5

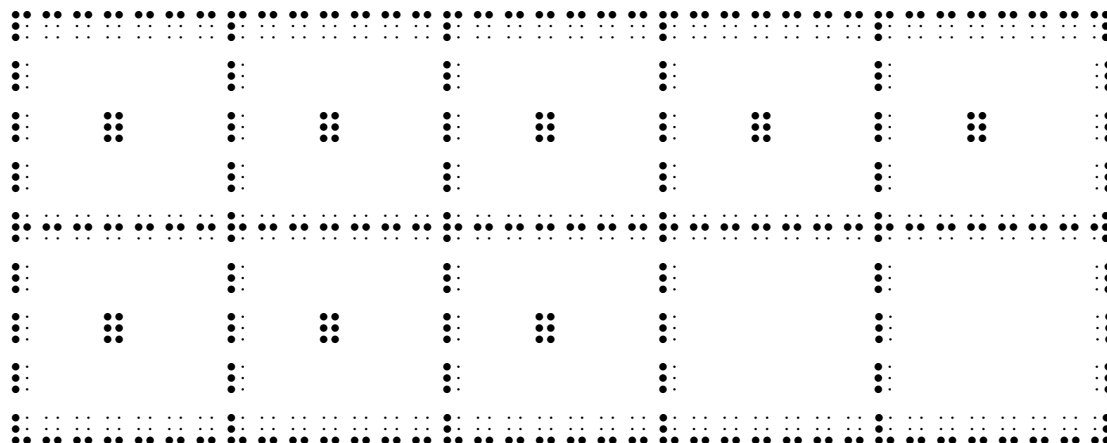
5. 2, 3, 4

Question 2.6

Let's return to your braille document. Turn to page 4 and find the ten frame at the top of the page.

6. How many more full braille cells are needed to make 10 in the ten frame? Don't forget to write your answer and number your problems.

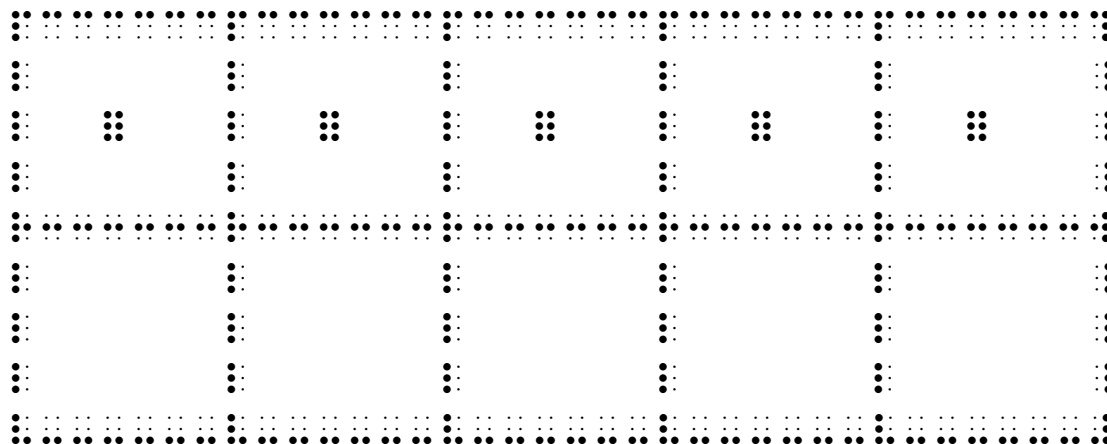
[Ten frame with 8 full braille cells, including 5 full braille cells in the top row and 3 full braille cells in the bottom row]



Question 2.7

7. How many more full braille cells are needed to make 10 in the ten frame at the bottom of the page?

[Ten frame with 5 full braille cells, including 5 full braille cells in the top row and 0 full braille cells in the bottom row]

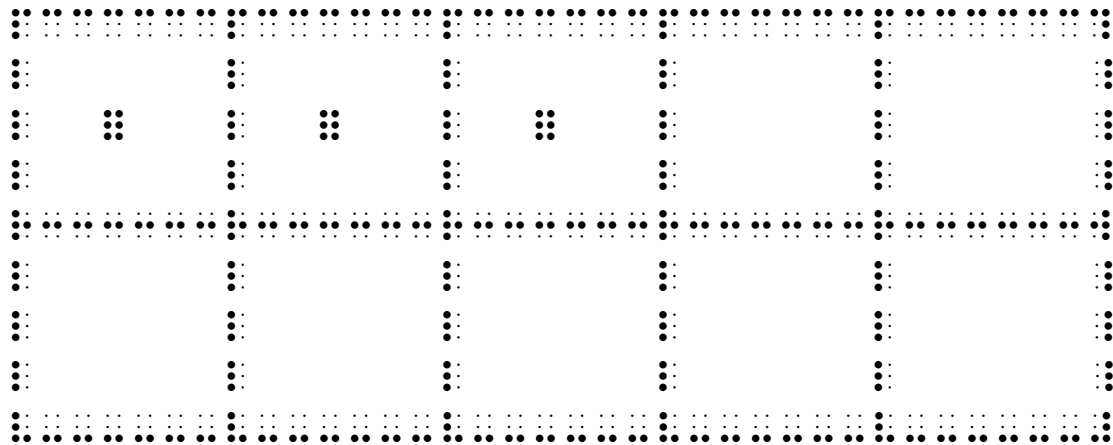


Question 2.8

Now turn to page 5 and find the ten frame at the top of the page.

8. How many more full braille cells are needed to make 10 in the next ten frame?

[Ten frame with 3 full braille cells, including 3 full braille cells in the top row and 0 full braille cells in the bottom row]



Listen carefully and then braille what you hear. This time you will not number the problems. Let me know if you need for me to repeat what you should braille. I will repeat each equation as many times as you need.

Question 2.9

$$3 = 3$$

Question 2.10

$$4 = 4$$

Question 2.11

$$1 = 1$$

Question 2.12

$$5 = 5$$

Question 2.13

$$2+2 = ?$$

Question 2.14

$$3+0 = ?$$

Question 2.15

$$5 = 0+5$$

Question 2.16

$$4 = 3+1$$

Question 2.17

$$2 = 1+1$$

Question 2.18

$$3 = 1+2$$

Question 2.19

$$2+3 = 5$$

Question 2.20

$$1+3 = 4$$

Question 2.21

$$1+0 = 1$$

Part 3

Part 3 Materials

- Student Braille Document: GK-M5-Check-Up-Student.brf
- APH Hundreds Board and Manipulatives Set, including the Numbers Set and the Grid Board (Alternatives: 1-inch tactile graph paper, graphic art tape used to arrange a grid on braille paper, Velcro pieces arranged in an array on construction paper with number flashcards)
- GK-M5-Check-Up-Data-Table.docx

Part 3 Teacher Note

Ensure that all numbers have been removed from the Grid Board before having the student create a braille chart each time.

Part 3 Teacher Script

Question 3.1

Count aloud to 100, beginning with 1.

Question 3.2

Use the Grid Board to create a braille chart from 1 to 100. Once you finish building your braille chart, read the numbers from 1 to 100 on the chart.

Question 3.3

Skip count by 10s to 100, using the chart that you just created.

Question 3.4

Find the following numbers on the braille chart that you created:

37 49 58 90 35 65 42 9 100

21 73 86 14 75 53 97 83 68

Question 3.5

Use your braille chart and count to 100 beginning with the following numbers:

45 67 59 94 78

Question 3.6

Use your braille chart and skip count by 10 through the last row in the chart, beginning with the following numbers:

23 37 59 12 68 45

Question 3.7

Turn to page 6 in your braille document and read the numbers from 1-50. There will be 4 numbers on each line.

[Make sure the student is viewing the first six lines of braille.]

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Question 3.8

Move your hands down to the next line of braille and then read the numbers from 51-75. There will be 4 numbers on each line.

[Make sure the student is viewing the remaining three lines of braille on page 6.]

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Question 3.9

Turn to page 7 and read the numbers from 76-100. There will be 4 numbers on each line.

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Listen as I read each math problem, and then use your chart to answer the question.

Question 3.10

What number is one less than 90?

Question 3.11

What number is one more than 74?

Question 3.12

What number is one less than 49?

Question 3.13

What number is one more than 83?

Question 3.14

What number is one less than 66?

Question 3.15

What number is one less than 71?

Question 3.16

What number is one more than 37?

Question 3.17

What number is one more than 45?

Question 3.18

What number is one less than 29?

Question 3.19

What number is one more than 93?

Part 4

Part 4 Materials

- Braillewriter
- Braille paper
- Ten frame (Alternative: APH Tactile Five and Ten Frames)
- Pennies (Alternatives: APH Tactile Tokens, magnetic counters)
- Work tray (Alternatives: cookie sheet)
- Optional: nonslip surface such as a rubber shelf liner or magnetic board to place the ten frame on
- GK-M5-Check-Up-Data-Table.docx

Part 4 Teacher Notes

- The ten frame is available in both uncontracted and contracted braille within the curriculum. The Tactile Tokens from APH fit perfectly into the ten frame and the two textures can represent the two addends. You can also use the shapes and line segments from the Picture Maker Wheatley Tactile Diagramming Kit to create the five and ten frames.
- Encourage the student to verbalize the process they use to solve each problem.

Part 4 Teacher Script

Solve the following five word problems using the ten frame and pennies by yourself. If you want to challenge yourself, write the equation too!

Question 4.1

There are 3 bananas and 6 oranges in the bowl. How many pieces of fruit are in the bowl altogether?

Question 4.2

Cara went on a nature walk. She found 4 leaves and 5 pines cones. How many things did she find on the nature walk?

Question 4.3

Mike had 2 red apples, and Victor had 8 green apples. How many apples do Mike and Victor have?

Question 4.4

Four friends sat on a bench and ate ice cream. Two more friends came to sit on the bench. How many friends are now sitting on the bench?

Question 4.5

Lots of animals live on the farm. In addition to a horse and a cow, there are 5 chickens and 2 goats. How many goats and chickens live on the farm?