

# **First Grade Module 1**

## **Addition and Subtraction to 10, English Letter Indicator for Multiple Choice, and Long Dash 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**

- Five and ten frames (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
- Student Braille Document: G1-M1-Check-Up-Student.brf
- G1-M1-Check-Up-Data-Table.docx

#### **Part 1 Teacher Notes**

- 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 frame.
- It may be helpful to assist the student in reading the title of the document, the subheading (Part 1), and the opening Nemeth indicator before moving to question 6 which is on the student braille document.

#### **Part 1 Teacher Script**

You will need your five frame, pennies, and work tray for the first four problems.

### Question 1.1

Begin by placing 4 pennies on the five frame. How many more pennies are needed to make 5?

### Question 1.2

Remove the pennies from the five frame and place them back in the work tray. Now place 2 pennies on the five frame. How many more pennies are needed to make 5?

### Question 1.3

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

### Question 1.4

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

For the next problem, you will need your ten frame, pennies, and work tray.

### Question 1.5

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

### Question 1.6

Find the long dash in the fifth line of braille on page 1.

### Question 1.7

Find the long dash in the equation on the sixth line of braille on page 1.

### Question 1.8

Now read the following numbered problems in braille.

[Make sure the student is viewing the set of problems on the second half of page 1.]

1 2 3 4 5 6 7 8 9 10  
 11 12 13 14 15 16 17 18 19 20  
 21 22 23 24 25 26 27 28 29 30  
 31 32 33 34 35 36 37 38 39 40  
 41 42 43 44 45 46 47 48 49 50

### Question 1.9

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

1 2 3 4 5 6 7 8 9 10  
 11 12 13 14 15 16 17 18 19 20  
 21 22 23 24 25 26 27 28 29 30  
 31 32 33 34 35 36 37 38 39 40  
 41 42 43 44 45 46 47 48 49 50  
 51 52 53 54 55 56 57 58 59 60  
 61 62 63 64 65 66 67 68 69 70  
 71 72 73 74 75 76 77 78 79 80

### Question 1.10

Now read the equations at the top of page 3 and then tell me what number the long dash stands for each time.

1 2 3 4 5 6 7 8 9 10  
 11 12 13 14 15 16 17 18 19 20  
 21 22 23 24 25 26 27 28 29 30  
 31 32 33 34 35 36 37 38 39 40

### Question 1.11

Let's try some more! Once again read the equations and tell me what number the long dash stands for each time.

[Make sure the student is viewing problems 6-10 on page 3.]

## Part 2

## Part 2 Materials

- Braillewriter
- Braille paper
- G1-M1-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
2. plus sign
3. general omission symbol
4. long dash
5. minus sign

### Question 2.2

Write the following problems: number 6: 2 plus 2 equals 4 and number 7: 3 plus 2 equals 5.

6.  $2+2 = 4$

7.  $3+2 = 5$

### Question 2.3

Write the following problems: number 8: 1 plus 4 equals blank, number 9: 0 plus 3 equals blank, and number 10: 4 plus blank equals 5.

8.  $1+4 = \underline{\hspace{1cm}}$

9.  $0+3 = \underline{\hspace{1cm}}$

10.  $4+ \underline{\hspace{1cm}} = 5$

### Question 2.4

Write the following problems: number 11: blank plus 1 equals 3, number 12: 4 plus 5 equals blank, number 13: 3 plus blank equals 6, number 14: blank plus 7 equals 9, and number 15: 2 plus blank equals 8.

11.  $\underline{\hspace{1cm}} +1 = 3$

12.  $4+5 = \underline{\hspace{1cm}}$

13.  $3+ \underline{\hspace{1cm}} = 6$

14.  $\underline{\hspace{1cm}} +7 = 9$

15.  $2+ \underline{\hspace{1cm}} = 8$

### Question 2.5

Write the following problems: number 16: 9 plus 1 equals blank, number 17: 8 plus blank equals 10, number 18: 6 plus 2 equals blank, number 19: 4 plus blank equals 8, and number 20: blank plus 5 equals 7.

16.  $9+1 = \underline{\hspace{1cm}}$

17.  $8+ \underline{\hspace{1cm}} = 10$

18.  $6+2 = \underline{\hspace{1cm}}$

19.  $4 + \underline{\quad} = 8$

20.  $\underline{\quad} + 5 = 7$

## Part 3

### Part 3 Materials

- Student Braille Document: G1-M1-Check-Up-Student.brf
- G1-M1-Check-Up-Data-Table.docx

### Part 3 Teacher Script

#### Question 3.1

Read the following equations in braille on page 4 in the braille document.

[Make sure the student is viewing the set of equations numbered 1 to 5 at the top of page 4.]

$$\begin{array}{l} 1. \quad 4 + 4 = 8 \\ 2. \quad 5 + 3 = 8 \\ 3. \quad 6 + 2 = 8 \\ 4. \quad 7 + 1 = 8 \\ 5. \quad 8 + 0 = 8 \end{array}$$

#### Question 3.2

Let's try some more.

[Make sure the student is viewing the set of equations numbered 6 to 10 on page 4.]

$$\begin{array}{l} 6. \quad 9 - 1 = 8 \\ 7. \quad 10 - 2 = 8 \\ 8. \quad 11 - 3 = 8 \\ 9. \quad 12 - 4 = 8 \\ 10. \quad 13 - 5 = 8 \end{array}$$

### Question 3.3

Now read the equations at the top of page 5, and tell me what number the long dash stands for each time.

### Question 3.4

Let's try some more problems on page 5, beginning with number 7. Once again read the equations and tell me what number the long dash stands for each time. You will find a Nemeth Code terminator after the last equation on the last line of the braille page.

Figure 1 shows five 3x3 dot patterns labeled (a) through (e). Each pattern consists of a 3x3 grid of dots, with some dots missing. The patterns are as follows:

- (a) All dots are present except the center dot (row 2, column 2).
- (b) All dots are present except the center dot (row 2, column 2) and the dot at (row 1, column 2).
- (c) All dots are present except the center dot (row 2, column 2) and the dots at (row 1, column 2) and (row 2, column 1).
- (d) All dots are present except the center dot (row 2, column 2) and the dots at (row 1, column 2) and (row 2, column 1) and (row 2, column 3).
- (e) All dots are present except the center dot (row 2, column 2) and the dots at (row 1, column 2) and (row 2, column 1) and (row 2, column 3) and (row 3, column 2).

Figure 1 shows five 3x3 dot patterns labeled (a) through (e). Each pattern consists of a 3x3 grid of dots, with some dots missing. The patterns are as follows:

- (a) 8 dots: All dots except the center dot.
- (b) 10 dots: All dots except the two center dots.
- (c) 6 dots: All dots except the two center dots and the two dots in the middle row.
- (d) 5 dots: All dots except the two center dots and the two dots in the middle row.
- (e) 7 dots: All dots except the two center dots.

Figure 1 consists of four 5x5 dot grids, labeled (a) through (d). Each grid contains a specific pattern of filled dots. (a) has 10 dots, (b) has 14 dots, (c) has 6 dots, and (d) has 10 dots. The patterns are as follows: (a) dots at (1,1), (1,2), (2,3), (2,4), (3,1), (3,2), (3,3), (3,4), (4,1), (4,2); (b) dots at (1,1), (1,2), (2,3), (2,4), (3,1), (3,2), (3,3), (3,4), (4,1), (4,2), (4,3), (4,4), (4,5), (5,1), (5,2); (c) dots at (1,1), (1,2), (2,3), (3,1), (3,2), (4,1); (d) dots at (1,1), (1,2), (2,3), (3,1), (3,2), (4,1), (4,2), (4,3), (4,4), (4,5).

## Part 4

### Part 4 Materials

- Braillewriter
- Braille paper
- G1-M1-Check-Up-Data-Table.docx

### Part 4 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 4.1

Write the following problems: number 1: 3 minus 2 equals 1 and number 2: 5 minus 1 equals 4.

1.  $3-2 = 1$

2.  $5-1 = 4$

#### Question 4.2

Write the following problems: number 3: 3 minus 0 equals blank, number 4: 7 minus 5 equals blank, number 5: 9 minus 6 equals blank, and number 6: blank minus 5 equals 0.

3.  $3-0 = \underline{\hspace{1cm}}$

4.  $7-5 = \underline{\hspace{1cm}}$

5.  $9-6 = \underline{\hspace{1cm}}$

6.  $\underline{\hspace{1cm}} - 5 = 0$

#### Question 4.3

Write the following problems: number 7: 4 minus blank equals 1, number 8: 10 minus blank equals 6, number 9: blank minus 2 equals 4, number 10: 9 minus blank equals 5, number 11: blank minus 8 equals 2, and number 12: 7 minus blank equals 3.

7.  $4- \underline{\hspace{1cm}} = 1$

8.  $10- \underline{\hspace{1cm}} = 6$



9. \_\_\_\_ -2 = 4

10. 9- \_\_\_\_ = 5

11. \_\_\_\_ -8 = 2

12. 7- \_\_\_\_ = 3

## Part 5

### Part 5 Materials

- Student Braille Document: G1-M1-Check-Up-Student.brf
- Braillewriter
- Braille paper
- G1-M1-Check-Up-Data-Table.docx
- Optional
  - Ten frame (Alternatives: APH Tactile Five and Ten Frames)
  - Pennies (Alternatives: APH Tactile Tokens, magnetic counters)
  - Work tray (Alternative: cookie sheet)
  - Nonslip surface such as a rubber shelf liner or magnetic board to place the ten frame on

### Part 5 Teacher Script

Begin on page 6 by reading each problem and answer choices. Pay attention to the sign of operation and then figure out the answer to the problem. Afterwards, write the problem number and letter of the correct answer choice. Then press your line spacing key twice to move to the next line of braille before beginning the next problem.

#### Question 5.1

[Make sure the student is viewing the first problem on page 6.]

9. \_\_\_\_ -2 = 4

10. 9- \_\_\_\_ = 5

11. \_\_\_\_ -8 = 2

12. 7- \_\_\_\_ = 3

### Question 5.2

[Make sure the student is viewing the second problem on page 6.]

### Question 5.3

Turn to page 7 and continue reading each problem and writing your answer.

### Question 5.4

[Make sure the student is viewing the second problem on page 7.]

### Question 5.5

Turn to page 8 and continue reading each problem and writing your answer.

1234 5678 9012 345678

123 456

123 456

123 456

123 456

### Question 5.6

[Make sure the student is viewing the second problem on page 8.]

1234 5678 9012 345678

123 4567

123 456

123 456

123 456

### Question 5.7

Turn to page 9 and continue to read each problem and answer choices. Pay attention to the sign of operation and then figure out the answer to the problem. Afterwards, tell me which answer choice is correct. You will not write your answer this time.

1234 5678 9012 345678 9012 3456

1234 5678 9012

1234 5678 9012

$\frac{1}{2} \times \frac{1}{2}$

$\frac{1}{2} \times \frac{1}{2}$

### Question 5.8

[Make sure the student is viewing the second problem on page 9.]

$\frac{1}{2} \times \frac{1}{2}$

$\frac{1}{2} \times \frac{1}{2}$

$\frac{1}{2} \times \frac{1}{2}$

$\frac{1}{2} \times \frac{1}{2}$

$\frac{1}{2} \times \frac{1}{2}$

### Question 5.9

Turn to page 10 and continue to read each problem and answer choices. Pay attention to the sign of operation and then figure out the answer to the problem. Afterwards, tell me which answer choice is correct. You will not write your answer.

$\frac{1}{2} \times \frac{1}{2}$

$\frac{1}{2} \times \frac{1}{2}$

$\frac{1}{2} \times \frac{1}{2}$

$\frac{1}{2} \times \frac{1}{2}$

$\frac{1}{2} \times \frac{1}{2}$

### Question 5.10

[Make sure the student is viewing the second problem on page 10.]

$12 \div 3 = 4$     $12 \div 4 = 3$     $12 \div 6 = 2$     $12 \div 8 = 1.5$     $12 \div 12 = 1$   
 $12 \div 15 = 0.8$     $12 \div 18 = 0.666$     $12 \div 20 = 0.6$   
 $12 \div 24 = 0.5$     $12 \div 30 = 0.4$     $12 \div 36 = 0.333$   
 $12 \div 40 = 0.3$     $12 \div 45 = 0.266$     $12 \div 48 = 0.25$   
 $12 \div 50 = 0.24$     $12 \div 60 = 0.2$     $12 \div 72 = 0.166$

### Question 5.11

Turn to page 11 and continue to read each problem and answer choices. Pay attention to the sign of operation and then figure out the answer to the problem. Afterwards, tell me which answer choice is correct. You will not write your answer.

$12 \div 3 = 4$     $12 \div 4 = 3$     $12 \div 6 = 2$     $12 \div 8 = 1.5$     $12 \div 12 = 1$   
 $12 \div 15 = 0.8$     $12 \div 18 = 0.666$     $12 \div 20 = 0.6$   
 $12 \div 24 = 0.5$     $12 \div 30 = 0.4$     $12 \div 36 = 0.333$   
 $12 \div 40 = 0.3$     $12 \div 45 = 0.266$     $12 \div 48 = 0.25$   
 $12 \div 50 = 0.24$     $12 \div 60 = 0.2$     $12 \div 72 = 0.166$

### Question 5.12

[Make sure the student is viewing the second problem on page 11.]

$12 \div 3 = 4$     $12 \div 4 = 3$     $12 \div 6 = 2$     $12 \div 8 = 1.5$     $12 \div 12 = 1$   
 $12 \div 15 = 0.8$     $12 \div 18 = 0.666$     $12 \div 20 = 0.6$   
 $12 \div 24 = 0.5$     $12 \div 30 = 0.4$     $12 \div 36 = 0.333$   
 $12 \div 40 = 0.3$     $12 \div 45 = 0.266$     $12 \div 48 = 0.25$   
 $12 \div 50 = 0.24$     $12 \div 60 = 0.2$     $12 \div 72 = 0.166$