

Pre-Kindergarten Module 4

Numerals 6-7

Teacher Script

Introduction

- All bracketed text should not be read aloud and is for reference only.
- The questions are not numbered in the student document. However, the questions have been numbered in this document to aid teachers and parents.
- Throughout the script, it is assumed that the student is correct. The teacher may need to go off script if the student does not answer a question correctly.

Section 1: Reading Numeral 6

Section 1 Materials

- Two swing cells (or two muffin tins and balls if you don't have access to swing cells)
- Student Braille Document: GPK-M4-Student-Materials.brf

Section 1 Teacher Note

If you are using hard copy braille, the student can do the following instead of making sounds whenever they find a numeral 6:

- Stomp a foot
- Underline or circle the numeral 6 with a grease marker or crayon
- Place a small sticker on top of each numeral 6

Section 1 Teacher Script

All aboard the Nemeth train to learn about the numerals 6 and 7!

Let's begin by reviewing what we know about how to read braille. First, how many hands will you use when reading braille? You got it! We read braille with both hands. Second, show me how you put your hands together when reading braille. That's right! Your index fingers will touch, and your fingers will be slightly curved. Third, show me how your fingers glide across the braille. Did you lightly touch the braille? It is important to use a soft and light touch across the braille.

Just like the numerals that you have learned, the numeral 6 begins with the numeric indicator in the first braille cell! It ends with dots 2-3-5 in the second braille cell.

[Make sure the student is viewing the numeral 6 at the top of page 1.]

6

Let's use the swing cells to build the numeral 6. Which dots make the numeric indicator? That's right! Dots 3-4-5-6 make the numeric indicator! Use the pegs to make the numeric indicator in the first braille cell. Then move to the second braille cell and place pegs in dots 2-3-5.

Practice 1.1

Now it is your turn to find the numeral 6 in each line. Move your fingers lightly across each line of braille and say "choo" whenever you find the numeral 6!

[Six lines of dots 2-5 on page 1 with a numeral 6 inserted in each line.]

Excellent work, train conductor! You found the numeral 6 in each line.

Practice 1.2

Now find the numeral 6 hidden in a line of railroad cars, which are really full braille cells.

[Six lines of full braille cells on page 2 with a numeral 6 inserted in each line.]

Practice 1.3

Sometimes a line of braille may have more than one numeral 6. Move your fingers lightly across the line of braille and find the numeral 6s. Remember to use both of your hands and keep your fingers slightly curved.

[Make sure the student is viewing the first line of braille on page 3.]

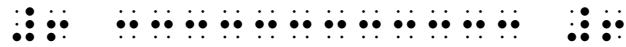
Fun Fact 1

Some trains have an engine at the front and another at the back.

You are making great progress, math superstar!

Practice 1.4

Continue to the next six lines of braille and find the numeral 6s. Say "the wheels on the train go round and round" when you find the numeral 6.

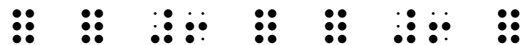
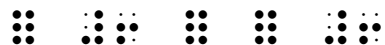


Chug-chug-chug-chug!

Practice 1.5

Move your fingers lightly over the braille and find the numeral 6s that are hiding in the line of railroad cars, which are really full braille cells.

[Six lines of full braille cells on page 4 with two numeral 6s inserted in each line.]



Practice 1.6

Let's find the numeral 6 again! This time say "wwwwooo" like the train whistle when you find the numeral 6! On some lines you find only 1 numeral 6 and on other lines you may find several numeral 6s.

[Seven lines of dots 2-5 on page 5 with one or more numeral 6s inserted in each line.]



Fun Fact 2

When a train only has one rail, it is called a monorail.

Practice 1.7

Sometimes a line of braille has more than one numeral. Find the numeral 6 in each line of braille. Say "all aboard" like a conductor when you find the numeral 6 in the line. Be careful to make sure it is a numeral 6 and not 1, 2, or 3. Just find the 6s.

[Six lines of dots 2-5 on page 6 with one or more numerals inserted in each line.]

The image displays a 4x10 grid of 40 groups of dots. Each group consists of 10 dots arranged in a 2x5 pattern. The dots are black and the background is white. The groups are arranged in four rows and ten columns. The first row contains 10 groups, the second row contains 10 groups, the third row contains 10 groups, and the fourth row contains 10 groups. Each group is a 2x5 grid of dots.

Excellent work! Did you know that the word 'train' comes from French?

Practice 1.8

Find the numeral 6 in each line. Be careful to make sure it is a numeral 6 and not 1, 2, 3, 4, or 5. Once again find just the 6s.

[Five lines of dots 2-5 on page 7 with two or three numerals inserted in each line.]

The figure consists of 10 diagrams arranged in two rows of five. Each diagram shows a pattern of black dots on a grid. The pattern starts as a small cluster of dots and grows into a larger, more complex shape. The diagrams are arranged in two rows of five.

Practice 1.9

Move your fingers lightly over the braille lines and find some more numeral 6s that are hiding in a line of magnet railroad cars and other numerals.

[Six lines of full braille cells on page 8 with one or more numerals inserted in each line.]

Figure 1 shows a 3x7 grid of dot patterns. The first six columns each contain a 3x3 grid of dots with one dot missing from a different position. The seventh column contains a 3x3 grid of dots with one dot missing from the top-right position.

That was super!

Practice 1.10

Let's find a few more numeral 6s hiding in a line of full braille cells and other numerals. Say "rail ticket" when you find a numeral 6.

[Six lines of full braille cells on page 9 with one or more numerals inserted in each line.]

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Fun Fact 3

A boxcar is a specially designed railroad car for carrying goods. A boxcar usually has high sides and a roof, so nothing falls out when the train is moving!

Section 2: Reading Numerals 1 to 6

Section 2 Materials

- Student Braille Document: GPK-M4-Student-Materials.brf
- Activity 1
 - Timer
 - Five flashcards for each numeral from 1-6 shuffled

Section 2 Teacher Script

Practice 2.1

Next, read the numeral at the beginning of each line and find its match on the line of braille. Make a sound like a train when you find the match! Chug-chug-chug!

[Make sure the student is viewing the seven lines of braille on page 10.]

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That was great reading, train conductor!

Practice 2.2

Just like last time, read the numeral at the beginning of each line and find its match on the line of braille. Make a sound like a train when you find the match! Chug-chug-chug!

[Make sure the student is viewing the six lines of braille on page 11.]

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Activity 1

Use your flashcards to practice reading the numerals 1-6. Once you can read all of the numerals correctly, go back and time how quickly you can read the numerals! Do you think you can read the numerals even quicker? Try one more time!

Fun Fact 4

The world's longest freight train was pulled by 8 diesel engines and had 682 box cars.

Section 3: Writing Numeral 6

Section 3 Materials

- Braillewriter
- Braille paper
- Two swing cells (or two muffin tins and balls if you don't have access to swing cells)
- Activity 2: same as the materials used in Section 3

Section 3 Teacher Script

Time for writing! Let's go back to the swing cells. First, use the pegs and make a numeric indicator again. Which dots make the numeric indicator? That's right! Dots 3-4-5-6 make the numeric indicator. Now open the swing cell. This will help you know where your fingers will go when you are writing!

Practice 3.1

Use the ring finger on your left hand and all three fingers on your right hand to write the numeric indicator on your braillewriter.

Now let's finish the numeral 6. With your second swing cell, place the pegs in dots 2-3-5. Now open the swing cell.

Practice 3.2

Use the middle and ring fingers on your left hand as well as the middle finger on your right hand. You try it now in the air and then on your braillewriter.

Practice 3.3

Let's practice writing the numeral 6 in Nemeth using your braillewriter. Space one time between your numerals.

When you finish writing your numerals several times, move your fingers across the braille and check your work!

Activity 2

You will need a sheet of braille paper and your braillewriter. Use your braillewriter to create 6 lines of full braille cells and numeral 6s for you, a teacher and/or a friend to read.

Make some of your lines long and some of the lines short. Use your thumb to space one time between your full braille cells and the numeral 6s. Also push your line spacing key twice at the end of a line to double space your lines of braille.

When you are finished, check your work and have fun reading the lines of braille you created!

Now try to find the shortest line and then the longest line. Don't forget to let a teacher or friend read the braille too!

Fun Fact 5

Underground trains are very important in cities because cars, taxis, and buses get stuck in traffic. In the United States, we call underground trains "subways".

That was great writing, train conductor.

Section 4: Reading Numeral 7

Section 4 Materials

- Two swing cells (or two muffin tins and balls if you don't have access to swing cells)
- Student Braille Document: GPK-M4-Student-Materials.brf
- Activity 3
 - Sorting tray with dividers
 - Five flashcards for each numeral from 1-6 shuffled

- Activity 4
 - One flashcard for each numeral from 1-7 shuffled
 - Craft sticks
 - An assortment of foam stickers
- Activity 5
 - Timer
 - Five flashcards for each numeral from 1-7 shuffled

Section 4 Teacher Script

Practice 4.1

Let's practice reading numerals 1 to 6 again before learning numeral 7.

[Make sure the student is viewing the two lines of braille on page 12.]

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Activity 3

Use your flashcards and find all of the numeral 6s. Place all the 6s in one stack and all the other numerals in a different stack.

Let's explore the numeral 7 in Nemeth!

[Make sure the student is viewing the numeral 7 at the top of page 13.]

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Numeral 7 begins with the numeric indicator in the first braille cell and ends with dots 2-3-5-6 in the second braille cell! Now let's use the swing cell. It is your turn to build the numeral 7 with a swing cell. Do you remember the dots that make a numeric indicator? That's right! Dots 3-4-5-6 make a numeric indicator!

Begin by using the pegs to make the numeric indicator in the first swing cell. Then move to the second swing cell and place pegs in dots 2-3-5-6. Congratulations! You made the numeral 7.

Tell me what the numeral 7 feels like to you. Then tell me what you like about trains. What is your favorite train fact?

Practice 4.4

Now there will be more than one numeral 7 on each line of braille. Move your fingers across the line of braille and make a sound like a train whistle when you find each numeral 7!

[Six lines of dots 2-5 on page 15 with two or three numeral 7s inserted in each line.]

Practice 4.5

Let's keep going! Now move your fingers like a train on train tracks across the line of braille and find all of the numeral 7s. They are hidden in a line of railroad cars, which are really full braille cells. Say "all aboard" each time you find the numeral 7!

[Six lines of full braille cells on page 16 with two numeral 7s inserted in each line.]

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Fun Fact 6

Some cities have subways that run above the ground or on the ground.

Practice 4.6

Let's find more numeral 7s. Say "choo choo" when you find the numeral 7 in each line. Be careful to make sure it is a numeral 7 and not a numeral 1, 2, or 3.

[Six lines of dots 2-5 on page 17 with two or three numerals inserted in each line.]

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You are a math superstar!

Practice 4.7

Let's find some more numeral 7s that are hiding in a line of railroad cars and numerals 1, 2, 3, 4, 5, and 6. Remember to find only the numeral 7s.

[Six lines of full braille cells on page 18 with one or more numerals inserted in each line.]

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Activity 4

You will need a set of flashcards labeled 1-7, craft sticks and an assortment of foam stickers. Shuffle the flashcards and draw a card. Read the numeral on the card and then build a "train" on a craft stick using that number of foam stickers. If you would like, you and a friend (or your teacher) can take turns drawing a card and creating a craft stick train!

Once you are finished, keep your craft stick trains for a future activity.

Practice 4.8

Now let's practice reading numerals 1 to 7.

[Make sure the student is viewing the first two lines of braille on page 19.]

Activity 5

Use your flashcards to practice reading the numerals 1-7. Once you can read all of the numerals correctly, go back and time how quickly you can read the numerals! Do you think you can read the numerals even quicker? Try one more time! Good luck, math superstar!

Section 5: Writing Numeral 7

Section 5 Materials

- Braillewriter
- Braille paper
- Two swing cells (or two muffin tins and balls if you don't have access to swing cells)

- Activity 6: in addition to the other materials used in Section 5,
 - Plastic cup
 - Craft stick trains from Activity 4

Section 5 Teacher Script

Time for writing! Let's go back to the swing cell and use the pegs to make a numeric indicator. Which dots make the numeric indicator? That's right! Dots 3-4-5-6 make the numeric indicator. Since the swing cell is closed, open the swing cell. This will help you know where your fingers will go on the braille keys!

Practice 5.1

Use the ring finger on your left hand and all three fingers on your right hand to write the numeric indicator on your braillewriter.

Now let's finish the numeral 7. On the second swing cell, place the pegs in dots 2-3-5-6.

Practice 5.2

Use the middle and ring fingers on your left hand and the middle and ring fingers on your right hand. Since the swing cell is closed, open the swing cell. This will help you know where your fingers will go for the second part of the numeral! You try it now in the air and then on your braillewriter.

Practice 5.3

Let's put the two cells together and practice writing the numeral 7 in Nemeth using your braillewriter. Space one time between your numerals.

When you finish writing your numerals several times, move your fingers across the braille and check your work!

Activity 6

You will need a sheet of braille paper, your braillewriter, a plastic cup, and your craft stick trains.

Put all of the craft stick trains in the plastic cup. Then take one of the trains out of the cup and count how many foam stickers are on the train. Then write how many foam stickers you counted. Repeat the process until all of the craft stick trains are gone.

Keep your craft stick trains to use in a future module.

Section 6: Review

Section 6 Materials

- Student Braille Document: GPK-M4-Student-Materials.brf
- Optional: one flashcard for each numeral from 1-7 in order on a nonslip surface, GPK-M4-Writing-Answers.brf
- Activity 7
 - One flashcard for each numeral from 1-7 shuffled
 - Optional: nonslip surface such as rubber shelf liner
- Activity 8
 - Railroad cars with numerals 1-5 from the last module
 - Brightly colored construction paper or braille paper cut into train car shapes – shapes available in the curriculum
 - Glue stick
 - Braille numerals 6-7 on small cards
 - Optional: scented stickers, Wikki Stix®, buttons, textured paper
- Activity 9
 - Two or more shoeboxes
 - Brightly colored construction paper
 - String
 - Scissors
 - Glue
 - Textured paper
 - One flashcard for each numeral from 1-7
 - Book entitled *Locomotive* by Brian Floca
 - At least 7 stuffed animals or toys
 - Optional: material, buttons, foam stickers in the shape of circles, shoelaces, rope, scented stickers, Wikki Stix®

Section 6 Teacher Notes

Activity 7

- Provide the student with a hard copy of numbers in order to use as a model.
- It may help to place the flashcards on a nonslip surface such as rubber shelf liner so they will not move as much.

Section 6 Teacher Script

All abroad the Nemeth train!

Practice 6.1

Read the numbers that are in order from 1 to 7.

[Make sure the student is viewing the third line of braille on page 19.]

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Practice 6.2

Go to the next line of braille and read the numbers in order from 1 to 7 again.

[Make sure the student is viewing the fourth line of braille on page 19.]

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Activity 7

You will need flashcards with numbers from 1 to 7. Shuffle the flashcards. Then place the numbers in order from 1 to 7. Use the line of braille with the numbers in order to assist you if needed.

Using the numbers in braille or your flashcards in order, what number comes after 5? That's right! 6 comes after 5. What number comes after 3? Perfect! 4 comes after 3. Now what number comes after 6? Way to go! 7 comes after 6.

Using the numbers in braille, what number comes before 6? Way to go! 5 comes before 6. Let's try another one. What number comes before 7? That's right. 6 comes before 7.

Practice 6.3

Now practice writing your numerals 1 to 7 using your braillewriter. Space one time between your numerals. When you finish writing, move your fingers across the braille and read the numerals you wrote!

Activity 8

Let's continue to build our number train. You will need: railroad cars with numerals 1-5 from the last module, brightly colored construction paper or braille paper cut into train car shapes, glue stick, and braille numerals 6-7 on small cards.

First, find the numeral 6 and glue it onto a railroad car. Then, find the numeral 7 and glue it onto another railroad car. Then put the railroad cars into order from 1 to 7. If you would like, you can “decorate” with scented stickers, Wikki Stix®, buttons, or textured paper.

Activity 9

In order to build a “shoebox” train, you will need at least 2 shoeboxes, brightly colored construction paper, string, scissors and glue. You will also need a set of flashcards with numerals 1-7. Before building a “shoebox” train, read the book entitled *Locomotive* by Brian Floca and learn how a railroad was built across the United States in the 1800s.

What did you learn about train travel in the 1800s?

Now we are ready to make a “shoebox” train to pull around the school or house. First, take the lids off the shoeboxes. We will not be using them. Second, cover the sides of the shoeboxes with construction paper. You can also use textured paper or material if you would prefer. Third, make pretend wheels for the railroad cars. Cut circles out of textured paper and glue them on the sides of the shoeboxes as the train wheels. You can also use large buttons or foam stickers in the shape of circles for the train wheels.

Then I will poke small holes in the sides of the boxes and help you thread some pieces of string (or shoelaces) through the holes. We will tie knots in the string so that they will not slip back through the holes. Don’t forget to include a string or rope on the front too. You may also enjoy “decorating” the railroad cars with scented stickers, Wikki Stix®, buttons, or textured paper/material.

Once you are finished, enjoy pulling the train around the room. Afterwards, count how many railroad cars you made and write the numeral on your braillewriter. Next count how many wheels are on the first railroad car. Write the numeral. Next count how many wheels are on the second railroad car. Write the numeral.

Now shuffle the flashcards with the numerals 1-7. Draw one flashcard. Place that many stuffed animals or toys in the railroad cars and pull them to a different train station. When you arrive, announce the name of the train station and take the stuffed animals or toys out of the railroad cars. Repeat the process until you have used all of the flashcards. If you would like, you and a friend (or a teacher) can take turns drawing flashcards and playing with the train!

Click-clack click-clack! Now you are ready to go down the track: module 4 check-up! Thank you for all of your hard work!