

February: Health measurements

February Numeracy: Health Measurements

Understand different units of measurement for weight, height, and temperature. Be able to read and understand medicine labels.

Materials include:

1. General explanation of unit
2. Terms for curriculum for all levels
3. Goals for each level
4. Suggested schedule for numeracy*
5. Content for teacher's "mini-lesson" per level
6. Worksheets per level
7. Instructions for class activity per level

General Explanation:

This month's numeracy lessons provide practice learning about and actually measuring different aspects of a person's health: weight, height, and body temperature. The students will learn about three different units of measurement that correspond to their health. They will also have practice in the 10 minute reviews to read and understand medicine labels. A range of ideas and choices will be offered. Choose appropriate information to include on your whiteboard medicine label—and appropriate question(s) for the class about the label.

Again, there may be a wide spectrum of ability in your classroom. Offer the appropriate levels (mini-lesson and worksheets) to your students. Choose and target your mini-lessons to the level of the majority of the class OR feel free to divide the class into two sections (or more) and offer two mini-lessons if there is a need to do so.

****The worksheets this month require scales, measuring tapes, and thermometers.**

You may want to order forehead thermometer strips ahead of time: You can buy 30 for \$12.88 (Look up on Walmart.com: Thermostrip Disposable 30 Ct.)

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Terms for Curriculum for All Levels

Basic Numeracy Schedule: The schedule is designed as a four week unit. The teacher is responsible for configuring the schedule to the current month and year. Reviews, computer slots, and worksheet days are merely a suggestion. Adjust accordingly to meet the needs of your class.

mini-lesson: (ml) : Provided lesson plans for a short introduction to the material.

worksheet: (ws): Provided material for students; 3 per month.

Operation box: (ob): VSS worksheets in addition, subtraction, multiplication, and division**

10 minute review: Teacher picks a regular time every class for ten minutes of numeracy review. It is meant to be a quick practice of numeracy, primarily focused on receptive and expressive language. Teacher/student reads numbers or problems. Students transcribe. Class checks together.

The beginning of class or the end of class can be effective times. The teacher can have students turn to a clean notebook page, use their “math” notebook, or can have pre-cut papers ready to hand out.

Teacher reads: T reads and the class transcribes numbers

Student reads: S reads and the class transcribes (gives students practice speaking)

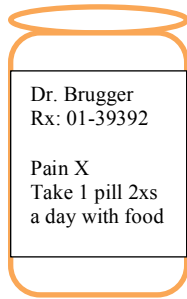
Checking Review Work: Students check their work. This can be a simple or creative process depending on time availability. Written answers are necessary in checking since the focus of the review is receptive/expressive language. This is also a time for practice with pronunciation or memorization of numbers/concept.

** Operation Boxes: (Continuation of October’s numeracy focus) I recommend that as a program you create four file boxes that contain practice worksheets for each of the functions (addition, subtraction, multiplication, division). It is best to offer a wide range of choices starting at very beginning levels and ending with more advanced worksheets. Students can then self-pace and work their way through the boxes during the year. Worksheets can come from websites offering free printables or workbooks.

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10 Minute Review: Medicine Label Ideas

Draw a “bottle” of some type on the board and a label with information on it:



Throughout the month, increase the amount and difficulty of information you put on your whiteboard medicine label. Also, change the information and placement of information every time.

Information to include:

1. Medicine name (real or fake)
 - For 200 most common prescribed drugs:
<http://www.rxlist.com/script/main/art.asp?articlekey=79509>
2. Dosage (real or fake)
 - Previous website also gives dosages for each medicine
3. Instructions
 - Make up instructions to challenge students/ provide a math problem: take twice daily in morning and night; 5 mg tablets: Take 17.5 mg once a week; Take with food; Take on an empty stomach, etc.

Extra information to include as the month progresses:

1. Pharmacy name
2. Doctor's name
3. Rx #
4. Pharmacy phone number
5. Pharmacy address
6. Warnings (Do not take without food; Do not drive after you take this medication.)

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10 Minute Review: Medicine Label Ideas (contd.)

Types of Questions to Ask:

1. When do you take the medicine?
2. How much do you take? (# of pills or mg)
3. What is the name of the medicine?
4. How much do you take in a week?
5. What are the special instructions?
6. Who is the prescribing doctor?
7. Pharmacy name, number, etc.
8. Rx number

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Level 1

L1 Goals: Understand different units of measurement for weight, height, and temperature.
Be able to read and understand medicine labels.

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	Medicine bottle diagram on board and question	Computer	10 min review: operations box worksheet	ml 1; ws1	Medicine bottle diagram on board and question
Week 2	Medicine bottle diagram on board and question	Computer	10 min review: operations box worksheet	ml 2; ws 2	Medicine bottle diagram on board and question
Week 3	Medicine bottle diagram on board and question	Computer	10 min review: operations box worksheet	ml 3; ws 3	Medicine bottle diagram on board and question
Week 4	Medicine bottle diagram on board and question	Computer	10 min review: operations box worksheet	ml 4: class activity	Medicine bottle diagram on board and question

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Level 1: Mini lesson 1

Plan:

10 minutes for mini lesson (teacher led instruction)

15 minutes for individual work (student only)

5 minutes for review (class, groups, pairs)

Materials Needed:

Scale(s)—more are preferable *If only one scale, complete as a class


Interesting things to weigh (from room or home)


Mini-lesson Content:

1. Introduction of weight
 - We measure weight in “pounds” ---abbreviation doesn’t match: lbs
 - Ask who has heard of “pounds” before—where? (grocery store, doctor’s office, new baby, etc.)
 - Ask them to raise hands if they know how much they weigh in pounds—and talk about how it is impolite to talk ask about a person’s weight in this culture.
2. Guessing a pound?
 - Have several volunteers finds things from your stash or around the room that they think might weigh 1 pound.
 - Weigh them together and see if they were correct—too heavy or too light.
 - **Teach “heavier.” The _____ is heavier than the _____.**
3. Looking at the scale:
 - If you have a digital scale, show students the whole numbers and decimal point and tell them to just look at the numbers to the left of the decimal.
 - If you have a scale with lines, show them how to count the lines to get the exact weight.
4. If you have more than 1 scale, break students into teams. Otherwise, complete the activity as a class.

Name _____


How much does it weigh?


1.  How much does 1 book weigh? _____ lbs.

2.  How much does a backpack weigh? _____ lbs.

3. A book + a backpack = _____ lbs.

4. A _____ is heavier than a _____.

5.  How much do 4 shoes weigh? _____ lbs.

6.  How much do 2 coats weigh? _____ lbs.

7. 4 shoes + 2 coats = _____ lbs.

8. The _____ are heavier than the _____.

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Level 1: Mini lesson 2

Plan:

10 minutes for mini lesson (teacher led instruction)

15 minutes for individual work (student only)

5 minutes for review (class, groups, pairs)

Materials Needed:

As many tape measures as possible.

Mini-lesson Content:

1. Introduction to a tape measure
 - Draw a tape measure on the board first with whole numbers
 - Count together and explain “length”—How long? How tall? How wide?
 - Measurement in inches—have students hold their fingers in inches. Show them abbreviation: in
 - Have them move their fingers apart 12 inches: a foot—show them abbreviation: ft
 - Show them inches and feet on a real tape measure.
 - If they understand, you can introduce half inches. If it seems like too much, just tell them to go to the closest big number.
2. Guess and measure together
 - Have the students guess how tall something/someone is in feet and inches. Write the guess down on the board then measure together.
 - Repeat
 - Fill in the statement together:
_____ is taller than _____.
3. Show how to measure a person: bottom of feet to top of head.
 - If students are comfortable, they can measure each other for the activity. If they are not, they can measure things around the room.

Name _____

How tall?

Measuring people:

1. _____ is _____ feet and _____ inches.

2. I am _____ feet and _____ inches.

3. _____ is taller than _____.

Measuring things:

4. The _____ is _____ feet and _____ inches.

5. The _____ is _____ feet and _____ inches.

6. The _____ is taller than the _____.

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Level 1: Mini lesson 3

Plan:

10 minutes for mini lesson (teacher led instruction)

20 minutes for individual work (student only)

5 minutes for review (class, groups, pairs)

Materials Needed:

Disposable forehead thermostrips (see Teacher notes for the month on where to buy)

(Or any kind of thermometer)

Mini-lesson Content:

1. Introduction to Temperature

- Ask students if they remember studying temperature in December? What do you use to find the temperature? (thermometer)
- Introduce temperature in your own body: What is a good temperature? (maybe a number—but probably what your skin “feels” like. What is a bad temperature? How do you know? What are the symptoms of a bad temperature? What does a bad temperature mean?)

2. Introduction to a Thermometer

- A thermometer is the instrument you use to measure temperature.
- Forehead thermometers are specifically used to measure body temperature.
- The “perfect” body temperature is 98.6.
- Anything below is unusual. Anything above is called a “fever.”
- Fever indicates your body is sick.
- Show the different measurements on the forehead thermometers—and colors.

3. Take your temperature

- Put your own thermometer strip to your head. Ask a volunteer (or 2) to read it, and write it on the board.
- Walk around the room so everyone can see what it looks like.

4. Rules for activity: everyone gets their own strip which THEY KEEP for themselves.

Name _____

Taking Your Temperature

Keep your own thermometer strip for your own head.

<u>What is your name?</u>	<u>Let me take your temperature.</u>	<u>Fever?</u> <u>Yes or No</u>
1.		
2.		
3.		
4.		
5.		
6.		

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Level 1: Culminating Group Activity

Plan:

10 minutes for warm up and directions (teacher led instruction)

10-15 minutes for race (student only)

5-10 minutes for review (class, groups, pairs)*

Materials Needed:

Thermometer strip and tape measure

Activity Goal: Students will be required to show their health measurement numeracy skills from the month in a realistic setting: They will use a doctor's office dialogue to practice the speaking, measuring, and writing involved in a doctor's appointment.

Activity Description: The teacher first goes over the dialogue with students. The teacher reads all of it. Then the teacher reads the nurse, and the students read the patient. Then they switch. Then half the class reads the nurse/patient and switch.

Put students in groups of 3-4 (depending on thermometers and tape measures available).

1 student is a nurse

1 student is a patient

1 student is the nurse's helper (writing down measurements)

1 student can observe or help with physical measurements

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Level 1, CA

Name _____

Doctor's Office

Nurse: Hello. What is your name?

Patient: Hi. My name is _____.

Nurse: When is your birthday?

Patient: My birthday is _____.

Nurse: First, I will take your temperature.

Patient: Ok.

Nurse: Your temperature is _____. Now I will see how tall you are.

Patient: Ok.

Nurse: You are _____ feet and _____ inches tall.

Nurse: Goodbye. The doctor will be in soon.

Patient: Thank you.

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Level 2

L2 Goals: Understand different units of measurement for weight, height and temperature.

Be able to read and understand medicine labels.

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	Medicine bottle diagram on board and question	10 min review: operations box worksheet	computer	ml 1, ws 1	Medicine bottle diagram on board and question
Week 2	Medicine bottle diagram on board and question	10 min review: operations box worksheet	computer	ml 2; ws 2	Medicine bottle diagram on board and question
Week 3	Medicine bottle diagram on board and question	10 min review: operations box worksheet	computer	ml 3; ws 3	Medicine bottle diagram on board and question
Week 4	Medicine bottle diagram on board and question	10 min review: operations box worksheet	computer	ml 4: class activity	Medicine bottle diagram on board and question

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Level 2: Mini lesson 1

Plan:

10 minutes for mini lesson (teacher led instruction)

15 minutes for individual work (student only)

5 minutes for review (class, groups, pairs)

Materials Needed:

Scale(s)—more are preferable *If only one scale, complete as a class

Interesting things to weigh (from room or home)

Mini-lesson Content:

1. Introduction of weight
 - We measure weight in “pounds” ---abbreviation doesn’t match: lbs
 - Ask who has heard of “pounds” before—where? (grocery store, doctor’s office, new baby, etc.)
 - Ask them to raise hands if they know how much they weigh in pounds—and talk about how it is impolite to talk ask about a person’s weight in this culture.
2. Guessing a pound?
 - Have several volunteers finds things from your stash or around the room that they think might weigh 1 pound.
 - Weigh them together and see if they were correct—too heavy or too light.
 - **Teach “heavier.” The _____ is heavier than the _____.**
3. Looking at the scale:
 - If you have a digital scale, show students the whole numbers and decimal point and tell them to just look at the numbers to the left of the decimal.
 - If you have a scale with lines, show them how to count the lines to get the exact weight.
4. If you have more than 1 scale, break students into teams. Otherwise, complete the activity as a class.

Name _____

How much does it weigh?

1. How much does 1 book weigh? _____ lbs.
2. How much does a backpack weigh? _____ lbs.
3. A book + a backpack = _____ lbs.
4. A _____ is heavier than a _____.

5. How much do 4 shoes weigh? _____ lbs.
6. How much do 2 coats weigh? _____ lbs.
7. 4 shoes + 2 coats = _____ lbs.
8. The _____ are heavier than the _____.

Guessing the weight

Pick something to weigh.

Write down its name.

Write a guess.

Weigh it and see if you are correct.

9. _____ Guess: _____ lbs. Weight: _____ lbs.

10. _____ Guess: _____ lbs. Weight: _____ lbs.

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Level 2: Mini lesson 2

Plan:

10 minutes for mini lesson (teacher led instruction)

15 minutes for individual work (student only)

5 minutes for review (class, groups, pairs)

Materials Needed:

As many tape measures as possible.

Mini-lesson Content:

1. Introduction to a tape measure
 - Draw a tape measure on the board first with whole numbers
 - Count together and explain “length”—How long? How tall? How wide?
 - Measurement in inches—have students hold their fingers in inches. Show them abbreviation: in
 - Have them move their fingers apart 12 inches: a foot—show them abbreviation: ft
 - Show them inches and feet on a real tape measure.
 - If they understand, you can introduce half inches. If it seems like too much, just tell them to go to the closest big number.
2. Guess and measure together
 - Have the students guess how tall something/someone is in feet and inches. Write the guess down on the board then measure together.
 - Repeat
 - Fill in the statement together:
_____ is taller than _____.
3. Show how to measure a person: bottom of feet to top of head.
 - If students are comfortable, they can measure each other for the activity. If they are not, they can measure things around the room.

Name _____

How tall?

Measuring people:

1. _____ is _____ feet and _____ inches.
2. I am _____ feet and _____ inches.
3. _____ is/am taller than _____.

Measuring things:

4. The _____ is _____ feet and _____ inches.
5. The _____ is _____ feet and _____ inches.
6. The _____ is taller than the _____.

Measuring People or Things:

7. _____ is _____ feet and _____ inches.
8. _____ is _____ feet and _____ inches.
9. _____ is taller than the _____.

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Level 2: Mini lesson 3

Plan:

10 minutes for mini lesson (teacher led instruction)

20 minutes for individual work (student only)

5 minutes for review (class, groups, pairs)

Materials Needed:

Disposable forehead thermostrips (see Teacher notes for the month on where to buy)

(Or any kind of thermometer)

Mini-lesson Content:

1. Introduction to Temperature

- Ask students if they remember studying temperature in December? What do you use to find the temperature? (thermometer)
- Introduce temperature in your own body: What is a good temperature? (maybe a number—but probably what your skin “feels” like. What is a bad temperature? How do you know? What are the symptoms of a bad temperature? What does a bad temperature mean?)

2. Introduction to a Thermometer

- A thermometer is the instrument you use to measure temperature.
- Forehead thermometers are specifically used to measure body temperature.
- The “perfect” body temperature is 98.6.
- Anything below is unusual. Anything above is called a “fever.”
- Fever indicates your body is sick.
- Show the different measurements on the forehead thermometers—and colors.

3. Take your temperature

- Put your own thermometer strip to your head. Ask a volunteer (or 2) to read it, and write it on the board.
- Walk around the room so everyone can see what it looks like.

4. Rules for activity: everyone gets their own strip which THEY KEEP for themselves.

Name _____

Taking Your Temperature

Keep your own thermometer strip for your own head.

<u>What is your name?</u> <u>(Can you spell that?)</u>	<u>Let me take your</u> <u>temperature.</u>	<u>Fever?</u> <u>Yes or No</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

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Level 2: Culminating Group Activity

Plan:

10 minutes for warm up and directions (teacher led instruction)

10-15 minutes for race (student only)

5-10 minutes for review (class, groups, pairs)*

Materials Needed:

Thermometer strip and tape measure

Activity Goal: Students will be required to show their health measurement numeracy skills from the month in a realistic setting: They will use a doctor's office dialogue to practice the speaking, measuring, and writing involved in a doctor's appointment.

Activity Description: The teacher first goes over the dialogue with students. The teacher reads all of it. Then the teacher reads the nurse, and the students read the patient. Then they switch. Then half the class reads the nurse/patient and switch.

Put students in groups of 3-4 (depending on thermometers and tape measures available).

1 student is a nurse

1 student is a patient

1 student is the nurse's helper (writing down measurements)

1 student can observe or help with physical measurements

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Level 2, CA

Name _____

Doctor's Office

Nurse: Hello. What is your name?

Patient: Hi. My name is _____.

Nurse: When is your birthday?

Patient: My birthday is _____.

Nurse: First, I will take your temperature.

Patient: Ok. Do I have a fever?

Nurse: _____. Your temperature is _____. Now I will see how tall you are.

Patient: Ok. How tall am I?

Nurse: You are _____ feet and _____ inches tall.

I am finished, but the doctor will be in soon.

Patient: Thank you.

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Level 3

L3 Goals: Understand different units of measurement for weight, height, and temperature.

Be able to use a scale, a tape measure and a thermometer to find body measurements and to solve other problems. Be able to read and understand medicine labels.

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	computer	Medicine bottle diagram on board and question	10 min review: operations box worksheet	ml 1, ws 1	Medicine bottle diagram on board and question
Week 2	computer	Medicine bottle diagram on board and question	10 min review: operations box worksheet	ml 2; ws 2	Medicine bottle diagram on board and question
Week 3	computer	Medicine bottle diagram on board and question	10 min review: operations box worksheet	ml 3; ws 3	Medicine bottle diagram on board and question
Week 4	computer	Medicine bottle diagram on board and question	10 min review: operations box worksheet	ml 4: class activity	Medicine bottle diagram on board and question

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Level 3: Mini lesson 1

Plan:

10 minutes for mini lesson (teacher led instruction)

15 minutes for individual work (student only)

5 minutes for review (class, groups, pairs)

Materials Needed:

Scale(s)—more are preferable *If only one scale, complete as a class

Interesting things to weigh (from room or home)

Mini-lesson Content:

1. Introduction of weight
 - We measure weight in “pounds” ---abbreviation doesn’t match: lbs
 - Ask who has heard of “pounds” before—where? (grocery store, doctor’s office, new baby, etc.)
 - Ask them to raise hands if they know how much they weigh in pounds—and talk about how it is impolite to talk ask about a person’s weight in this culture.
2. Guessing a pound?
 - Have several volunteers finds things from your stash or around the room they think might weigh 1 pound.
 - Weigh them together and see if they were correct—too heavy or too light.
 - **Teach “heavier.” The _____ is heavier than the _____.**
3. Looking at the scale:
 - If you have a digital scale, show students the whole numbers and decimal point and tell them to just look at the numbers to the left of the decimal.
 - If you have a scale with lines, show them how to count the lines to get the exact weight.
4. If you have more than 1 scale, break students into teams. Otherwise, complete the activity as a class.

Name _____

How much does it weigh?

1. How much does 1 book weigh? _____ lbs.
2. How much does a backpack weigh? _____ lbs.
3. A book + a backpack = _____ lbs.
4. A _____ is heavier than a _____.
5. How much do 4 _____ weigh? _____ lbs.
6. How much do 2 _____ weigh? _____ lbs.
7. 4 _____ + 2 _____ = _____ lbs.
8. The _____ are heavier than the _____.

Guessing the weight

Pick something to weigh.

Write down its name.

Write a guess.

Weigh it and see if you are correct.

9. _____ Guess: _____ lbs. Weight: _____ lbs.
10. _____ Guess: _____ lbs. Weight: _____ lbs.
11. _____ Guess: _____ lbs. Weight: _____ lbs.
12. _____ Guess: _____ lbs. Weight: _____ lbs.

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Level 3: Mini lesson 2

Plan:

10 minutes for mini lesson (teacher led instruction)

15 minutes for individual work (student only)

5 minutes for review (class, groups, pairs)

Materials Needed:

As many tape measures as possible.

Mini-lesson Content:

1. Introduction to a tape measure
 - Draw a tape measure on the board first with whole numbers
 - Count together and explain “length”—How long? How tall? How wide?
 - Measurements in inches—have students hold their fingers in inches. Show them abbreviation: in
 - Have them move their fingers apart 12 inches: a foot—show them abbreviation: ft
 - Show them inches and feet on a real tape measure.
 - Introduce half inches. Show them how the $\frac{1}{2}$ inch mark is longer than the other marks. Practice finding $\frac{1}{2}$ inch marks together.
2. Guess and measure together
 - Have the students guess how tall something/someone is in feet and inches. Write the guess down on the board then measure together.
 - Repeat
 - Fill in the statement together:
_____ is taller than _____.
3. Show how to measure a person: bottom of feet to top of head.
 - If students are comfortable, they can measure each other for the activity. If they are not, they can measure things around the room.

Name _____

How tall?

Measuring people:

1. _____ is _____ feet and _____ inches.
2. I am _____ feet and _____ inches.
3. _____ is/am taller than _____.
4. _____ is _____ feet and _____ inches.
5. I am _____ feet and _____ inches.
6. _____ is/am taller than _____.

Measuring things:

7. The _____ is _____ feet and _____ inches.
8. The _____ is _____ feet and _____ inches.
9. The _____ is taller than the _____.

Measuring People or Things:

10. _____ is _____ feet and _____ inches.
11. _____ is _____ feet and _____ inches.
12. _____ is taller than the _____.

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Level 3: Mini lesson 3

Plan:

10 minutes for mini lesson (teacher led instruction)

20 minutes for individual work (student only)

5 minutes for review (class, groups, pairs)

Materials Needed:

Disposable forehead thermostrips (see Teacher notes for the month on where to buy)

(Or any kind of thermometer)

Mini-lesson Content:

1. Introduction to Temperature

- Ask students if they remember studying temperature in December? What do you use to find the temperature? (thermometer)
- Introduce temperature in your own body: What is a good temperature? (maybe a number—but probably what your skin “feels” like. What is a bad temperature? How do you know? What are the symptoms of a bad temperature? What does a bad temperature mean?)

2. Introduction to a Thermometer

- A thermometer is the instrument you use to measure temperature.
- Forehead thermometers are specifically used to measure body temperature.
- The “perfect” body temperature is 98.6
- Anything below is unusual. Anything above is called a “fever.”
- Fever indicates your body is sick.
- Show the different measurements on the forehead thermometers—and colors.

3. Take your temperature

- Put your own thermometer strip to your head. Ask a volunteer (or 2) to read it, and write it on the board.
- Walk around the room so everyone can see what it looks like.

4. Rules for activity: everyone gets their own strip which THEY KEEP for themselves.

Name _____

Taking Your Temperature

Keep your own thermometer strip for your own head.

<u>What is your first name?</u> <u>What is your last name?</u> <u>(How do you spell that?)</u>	<u>Let me take your</u> <u>temperature.</u>	<u>Fever?</u> <u>Yes or No</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

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Level 3: Culminating Group Activity

Plan:

10 minutes for warm up and directions (teacher led instruction)

10-15 minutes for race (student only)

5-10 minutes for review (class, groups, pairs)*

Materials Needed:

Thermometer strip and tape measure

Activity Goal: Students will be required to show their health measurement numeracy skills from the month in a realistic setting: They will use a doctor's office dialogue to practice the speaking, measuring, and writing involved in a doctor's appointment.

Activity Description: The teacher first goes over the dialogue with students. The teacher reads all of it. Then the teacher reads the nurse, and the students read the patient. Then they switch. Then half the class reads the nurse/patient and switch.

Put students in groups of 3-4 (depending on thermometers and tape measures available).

1 student is a nurse

1 student is a patient

1 student is the nurse's helper (writing down measurements)

1 student can observe or help with physical measurements

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Level 3, CA

Name _____

Doctor's Office

Nurse: Hello. What is your first and last name?

Patient: Hi. My first name is _____. My last name is _____.

Nurse: When is your birthday?

Patient: My birthday is _____.

Nurse: First, I will take your temperature. I am going to put this thermometer on your forehead.

Patient: Ok. Do I have a fever?

Nurse: _____. Your temperature is _____. Now I will see how tall you are. Please stand up very straight.

Patient: Ok. How tall am I?

Nurse: You are _____ feet and _____ inches tall.

I am finished with my part, but the doctor will be in to see you shortly.

Patient: Thank you, Nurse.

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Level 4

L4 Goals: Understand different units of measurement for weight, height, and temperature.

Be able to use a scale, a tape measure and a thermometer to find body measurements and to solve other problems. Be able to read and understand medicine labels.

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	Medicine bottle diagram on board and questions	ml 1, ws 1	10 min review: operations box worksheet	computer	Medicine bottle diagram on board and questions
Week 2	Medicine bottle diagram on board and questions	ml 2; ws 2	10 min review: operations box worksheet	Computer	Medicine bottle diagram on board and questions
Week 3	Medicine bottle diagram on board and questions	ml 3; ws 3	10 min review: operations box worksheet	Computer	Medicine bottle diagram on board and questions
Week 4	Medicine bottle diagram on board and questions	ml 4: class activity	10 min review: operations box worksheet	Computer	Medicine bottle diagram on board and questions

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Level 4: Mini lesson 1

Plan:

10 minutes for mini lesson (teacher led instruction)

15 minutes for individual work (student only)

5 minutes for review (class, groups, pairs)

Materials Needed:

Scale(s)—more are preferable *If only one scale, complete as a class

Interesting things to weigh (from room or home)

Mini-lesson Content:

1. Introduction of weight
 - We measure weight in “pounds” ---abbreviation doesn’t match: lbs
 - Ask who has heard of “pounds” before—where? (grocery store, doctor’s office, new baby, etc.)
 - Ask them to raise hands if they know how much they weigh in pounds—and talk about how it is impolite to talk ask about a person’s weight in this culture.
2. Guessing a pound
 - Have several volunteers finds things from your stash or around the room they think might weigh 1 pound.
 - Weigh them together and see if they were correct—too heavy or too light.
 - **Teach “heavier.”** The _____ is heavier than the _____.
 - **Teacher “lighter.”** The _____ is lighter than the _____.
3. Looking at the scale:
 - If you have a digital scale, show students all three parts of the number: the whole number, the decimal point, and tenths of pounds to the right. Practice rounding up or down to the closest whole number.
 - If you have a scale with lines, show them how to count the lines to get the exact weight.
4. If you have more than 1 scale, break students into teams. Otherwise, complete the activity as a class.

Name _____

How much does it weigh?

1. How much do 4 books weigh? _____ lbs.
2. How much does a backpack weigh? _____ lbs.
3. 4 books + a backpack = _____ lbs.
4. _____ is/are lighter than _____.
5. How much do 5 _____ weigh? _____ lbs.
6. How much do 2 _____ weigh? _____ lbs.
7. 5 _____ + 2 _____ = _____ lbs.
8. The _____ are heavier than the _____.

Guessing the weight

Pick something to weigh.

Write down its name.

Write a guess.

Weigh it and see if you are correct.

9. _____ Guess: _____ lbs. Weight: _____ lbs.
10. _____ Guess: _____ lbs. Weight: _____ lbs.
11. _____ Guess: _____ lbs. Weight: _____ lbs.
12. _____ and _____ Guess: _____ lbs.
Weight: _____ lbs.

February: Health measurements

Level 4: Mini lesson 2

Plan:

10 minutes for mini lesson (teacher led instruction)

15 minutes for individual work (student only)

5 minutes for review (class, groups, pairs)

Materials Needed:

As many tape measures as possible.

Mini-lesson Content:

1. Introduction to a tape measure
 - Draw a tape measure on the board first with whole numbers and tenths.
 - Count together and explain “length”—How long? How tall? How wide?
 - Measurements in inches—have students hold their fingers in inches. Show them abbreviation: in
 - Have them move their fingers apart 12 inches: a foot—show them abbreviation: ft
 - Show them inches and feet on a real tape measure.
 - Introduce half inches and tenths. Show them how the $\frac{1}{2}$ inch mark is longer than the other marks. Practice finding $\frac{1}{2}$ inch marks and $\frac{1}{10}$ marks together.
2. Guess and measure together
 - Have the students guess how tall something/someone is in feet and inches. Write the guess down on the board then measure together.
 - Repeat
 - Fill in the statement together:
_____ is taller than _____.
3. Show how to measure a person: bottom of feet to top of head.
 - If students are comfortable, they can measure each other for the activity. If they are not, they can measure things around the room.

Name _____

How tall?

Measuring people:

1. _____ is _____ feet and _____ inches.
2. I am _____ feet and _____ inches.
3. _____ is/am _____ inches taller than _____.
4. _____ is _____ feet and _____ inches.
5. I am _____ feet and _____ inches.
6. _____ is/am _____ inches shorter than _____.

Measuring things:

7. The _____ is _____ feet and _____ inches.
8. The _____ is _____ feet and _____ inches.
9. The _____ is _____ inches taller than the _____.

Measuring People or Things:

10. _____ is _____ feet and _____ inches.
11. _____ is _____ feet and _____ inches.
12. _____ is _____ inches taller than the _____.

February: Health measurements

Level 4: Mini lesson 3

Plan:

10 minutes for mini lesson (teacher led instruction)

20 minutes for individual work (student only)

5 minutes for review (class, groups, pairs)

Materials Needed:

Disposable forehead thermostrips (see Teacher notes for the month on where to buy)

(Or any kind of thermometer)

Mini-lesson Content:

1. Introduction to Temperature

- Ask students if they remember studying temperature in December? What do you use to find the temperature? (thermometer)
- Introduce temperature in your own body: What is a good temperature? (maybe a number—but probably what your skin “feels” like. What is a bad temperature? How do you know? What are the symptoms of a bad temperature? What does a bad temperature mean?)

2. Introduction to a Thermometer

- A thermometer is the instrument you use to measure temperature.
- Forehead thermometers are specifically used to measure body temperature.
- The “perfect” body temperature is 98.6.
- Anything below is unusual. Anything above is called a “fever.”
- Fever indicates your body is sick.
- Show the different measurements on the forehead thermometers—and colors.

3. Take your temperature

- Put your own thermometer strip to your head. Ask a volunteer (or 2) to read it, and write it on the board.
- Walk around the room so everyone can see what it looks like.

4. Rules for activity: everyone gets their own strip which THEY KEEP for themselves.

Name _____

Taking Your Temperature

Keep your own thermometer strip for your own head. When you measure someone else's temperature, use his or her strip.

<u>What is your first and last name?</u>	<u>Let me take your temperature. Your temperature is...</u>	<u>Fever? Yes or No</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

February: Health measurements

Level 4: Culminating Group Activity

Plan:

10 minutes for warm up and directions (teacher led instruction)

10-15 minutes for race (student only)

5-10 minutes for review (class, groups, pairs)*

Materials Needed:

Thermometer strip and tape measure

Activity Goal: Students will be required to show their health measurement numeracy skills from the month in a realistic setting: They will use a doctor's office dialogue to practice the speaking, measuring, and writing involved in a doctor's appointment.

Activity Description: The teacher first goes over the dialogue with students. The teacher reads all of it. Then the teacher reads the nurse, and the students read the patient. Then they switch. Then half the class reads the nurse/patient and switch.

Put students in groups of 3-4 (depending on thermometers and tape measures available).

1 student is a nurse

1 student is a patient

1 student is the nurse's helper (writing down measurements)

1 student can observe or help with physical measurements

February: Health measurements

Level 4, CA

Name _____

Doctor's Office

Nurse: Hello. I am _____. I am Doctor Van's nurse. What is your first and last name?

Patient: Hi. My name is _____.

Nurse: When is your birthday, _____?

Name of patient

Patient: My birthday is _____.

Nurse: Great. First, I will take your temperature. I am going to put this thermometer on your forehead.

Patient: Ok. What is my temperature? Do I have a fever?

Nurse: _____. Your temperature is _____. Now I will see how tall you are. Please stand up very straight.

Patient: Ok. How tall am I?

Nurse: You are _____ feet and _____ inches tall.

I am finished with my part now. Please take a seat and the doctor will be in to see you shortly.

Patient: Thank you, Nurse.