

May Numeracy: Calculating Pay

Using hours and wage, calculate daily pay, weekly pay, and Gross Pay for the pay period. Subtract withholdings to calculate Net Pay. Solve word problems and comparison problems with Gross Pay and Net Pay.

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 how to calculate pay. Students will learn how to calculate daily and weekly pay to learn Gross Pay. They will learn about withholdings. They will calculate the withholdings (differently at different levels) and subtract them to learn what the Net Pay is. They will solve for Gross Pay and Net in word problems and will have a cumulative activity based on comparing either wages or Gross/Net pay depending on the level.

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.

****Calculators and Play Money are needed this month.**

May: Calculating Pay

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.

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.

May: Calculating Pay

Level 1

L1 Goals: Using hours and wage, calculate daily pay, weekly pay, and Gross Pay for the pay period. Subtract withholdings to calculate Net Pay. Solve comparison problems calculating daily pay.

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	Read a job description including the pay per hour . Students write down the pay. Decide if they want to apply for job based on pay.	Computer	10 min review: operations box worksheet	ml 1; ws1	Read a job description including the pay per hour . Students write down the pay. Decide if they want to apply for job based on pay.
Week 2	Read a job description including the pay per hour and hours per week . Students write down the both. Decide if they want to apply for job based on pay.	Computer	10 min review: operations box worksheet	ml 2; ws 2	Read a job description including the pay per hour and hours per week . Students write down the both. Decide if they want to apply for job based on pay.
Week 3	Read a job description including the pay per hour and hours per week . Students write down the both and if it's a FT or PT job . Decide if they want to apply for job based on pay.	Computer	10 min review: operations box worksheet	ml 3; ws 3	Read a job description including the pay per hour and hours per week . Students write down the both and if it's a FT or PT job . Decide if they want to apply for job based on pay.
Week 4	Read a job description including the pay per hour and hours per week . Have them calculate daily pay with calculators.	Computer	10 min review: operations box worksheet	ml 4: comparing daily pay	Read a job description including the pay per hour and hours per week . Have them calculate daily pay with calculators.

* Teachers are responsible for coming up with their own “job descriptions.” Add more or less description to the job ads to make it more or less challenging (ex: where to apply (a website or in person), a phone number to call, other benefits available, etc.)

Level 1: Mini lesson 1

Plan:

20 minutes for mini lesson (teacher led instruction)

0 minutes for individual work (student only)

10 minutes for review (class, groups, pairs)

Materials Needed:

Calculators

Mini-lesson Content: *Do Worksheet Together*

1. Elicit prior knowledge about work and pay
 - How much do they think someone should get paid an hour—looking for an idea about wages—not a conversation about a living wage.
 - How many hours do people usually work a day (usually 6-8 for full time)
 - Elicit anything else that will be helpful in explaining daily pay.
2. Do an example together using the information from above
 - Use the money amount they suggested and the hours to write out a simple problem on the board in the same format of the worksheet. Use a student's name in the example to cut down on words they don't know.
 - Read through it together (possibly several times)
 - Write the \$ ____ + \$ ____ like the worksheet on the board. Fill in the price the number of hours worked per day. Go through it slowly—each hour they earn that amount.
 - Have them try entering it in their calculators. Check together.
3. Introduce multiplication as a “faster way to add”
 - * It is not necessary that they fully understand HOW this works right now. They are using calculators and by showing them how to calculate the answer, they will learn a practical skill should they need it in real life.
 - They type in the computer the number of hours, then “times,” then pay, then “equals” to find the answer.

May: Calculating Pay

Level 1, WS 1

Name _____

Daily Pay

1. Bob works 8 hours a day.

He makes \$7.00 per hour.

How much does Bob make a day?

$$\$_{\quad} + \$_{\quad} = \$_{\quad}$$

or

$$\$_{\quad} \times \text{______} \text{ hours} = \$_{\quad} \text{ a day}$$

2. Mia works 6 hours a day.

She makes \$9.00 per hour.

How much does Mia make a day?

$$\$_{\quad} + \$_{\quad} + \$_{\quad} + \$_{\quad} + \$_{\quad} + \$_{\quad} = \$_{\quad}$$

or

$$\$_{\quad} \times \text{______} \text{ hours} = \$_{\quad} \text{ a day}$$

Level 1: Mini lesson 2

Plan:

10 minutes for mini lesson (teacher led instruction)

10 minutes for individual work (student only)

10 minutes for review (class, groups, pairs)

Materials Needed:

Calculators

Mini-lesson Content:

1. Elicit prior knowledge about work and pay
 - How many hours do people usually work a week
 - How many days in a week?...do people usually work?
 - Explain full time/part time: FT 30-40 hrs, PT 29 or fewer hrs
 - Elicit anything else that will be helpful in explaining weekly pay.
2. Do an example together using the information from above
 - Use the money amount they suggested and the hours to write out a simple problem on the board in the same format of the worksheet. Use a student's name in the example to cut down on words they don't know.
 - Read through it together (possibly several times)
 - Write the \$ ____ x ____ hours = \$ ____....see if they can fill it in.
 - Have them try entering it in their calculators. Check together.
3. Evaluate to see if they need another class example
 - * If they seem confident, let them try the worksheet by themselves. If not, either do more examples or complete the worksheet together.

May: Calculating Pay

Level 1, WS 2

Name _____

Weekly Pay

1. Vue works 40 hours a week.

He makes \$8.00 per hour.

How much does Vue make a week?

$$\$_{\quad} \times \quad \text{hours} = \$_{\quad} \text{ a week}$$

2. Li works 35 hours a week.

She makes \$7.00 per hour.

How much does Li make a week?

$$\$_{\quad} \times \quad \text{hours} = \$_{\quad} \text{ a week}$$

3. Fatima works 10 hours a week.

She makes \$10.00 per hour.

How much does Fatima make a week?

$$\$_{\quad} \times \quad \text{hours} = \$_{\quad} \text{ a week}$$

May: Calculating Pay

Level 1: Mini lesson 3

Plan:

15 minutes for mini lesson (teacher led instruction)

10 minutes for individual work (student only)

10 minutes for review (class, groups, pairs)

Materials Needed:

Calculator

Play Money

Mini-lesson Content:

****This is an introduction to a sophisticated concept. It is meant only to be that—not a complete explanation. This introduction can prove valuable to have a basic knowledge that no one gets to keep all the money he or she makes.**

1. Explain the concept of withholdings concretely
 - Call a student up to the front. Say you are going to pay him for his work for the week. Count out all the money you are going to pay him (40 hours x \$8)—solve as a class.
 - Ask the volunteer if he/she gets all this money? Why? Why not?
 - Take a little out at a time and give it to 4 different students in class (Social Security (FICA), Medicare tax, Federal Income Tax, Minnesota Tax)—amount doesn't really matter—concept is the key.
 - Count how much money the student has left. Give it to the student as his pay.
 - Ask students to raise hands to see who knew they did/didn't get to keep all of their paychecks.
2. Introduce subtraction
 - When you take money away, you use subtraction. The name of the symbol on the calculator is “minus” –show on calculator
 - Write out the problem you just demonstrated: $\$400 - \underline{\quad} = \$\underline{\quad}$
 - Everyone practice on calculators

May: Calculating Pay

Level 1, WS 3

Name _____

Withholdings:

Money from your paycheck that is taken out for taxes.

1. John makes \$400 a week.

\$50 is withheld from his pay.

What is his pay?

$$\text{\$ } \underline{\hspace{2cm}} \text{ - } \text{\$ } \underline{\hspace{2cm}} \text{ = } \text{\$ } \underline{\hspace{2cm}}$$

2. Cara makes \$350 a week.

\$40 is withheld from her pay.

What is her pay?

$$\text{\$ } \underline{\hspace{2cm}} \text{ - } \text{\$ } \underline{\hspace{2cm}} \text{ = } \text{\$ } \underline{\hspace{2cm}}$$

3. Thai makes \$250 a week.

\$28 is withheld from his pay.

What is his pay?

$$\text{\$ } \underline{\hspace{2cm}} \text{ - } \text{\$ } \underline{\hspace{2cm}} \text{ = } \text{\$ } \underline{\hspace{2cm}}$$

May: Calculating Pay

Level 1: Culminating Group Activity

Plan:

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

10-15 minutes for pair/group work

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

Materials Needed:

Calculators

Activity Goal: Students will be required to show their calculating skills to compare daily vs. weekly pay. They will have to multiply and consider time specifically. This may be very challenging. Assign 3-4 people per group to solve it. Review it as class. You also have the option of completing it as a class (or the first one and they solve the second.)

Activity Description: Students work in groups to solve each job “problem.” They have to figure out how much money each person is paid to know who makes the most. They circle the box of the job that pays the most.

- Review how to figure out daily pay (hours x pay = daily pay) (AND language—“a day”)
- Review how to figure out weekly pay (hours x pay = weekly pay) (AND language)
- How do you compare? Must be the same...if you are comparing daily and weekly pay...you have to make them the same. They both must be weekly pay.
Ex: daily pay is \$60. He works Saturday and Sunday only. What is his weekly pay?
 $60 + 60$ (or 60×2).

Name _____

Comparing Pay

Circle the job that pays the most.

1.

<p>Job 1: Stan works 7 hours a day. He works Monday and Thursday. He makes \$13 an hour.</p>	<p>Job 2: Jill works 40 hours a week. She makes \$9 an hour.</p>
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2.

<p>Job 3: Ted works 8 hours a day. He works Monday-Friday He makes \$10 an hour.</p>	<p>Job 4: Blia works 40 hours a week. She makes \$9.50 an hour.</p>
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May: Calculating Pay

Level 2

L2 Goals: Using hours and wage, calculate daily pay, weekly pay, and Gross Pay for the pay period. Subtract withholdings to calculate Net Pay. Solve comparison problems calculating weekly pay.

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	Read a job description including the pay per hour . Students write down the pay. Decide if they want to apply for job based on pay.	10 min review: operations box worksheet	computer	ml 1, ws 1	Read a job description including the pay per hour and hours per week . Students write down the both. Decide if they want to apply for job based on pay.
Week 2	Read a job description including the pay per hour and hours per week . Students write down the both and if it's a FT or PT job . Decide if they want to apply for job based on pay.	10 min review: operations box worksheet	computer	ml 2; ws 2	Read a job description including the pay per hour and hours per week . Have them calculate daily pay with calculators
Week 3	Read a job description including the pay per hour and hours per week . Have them calculate weekly pay with calculators	10 min review: operations box worksheet	computer	ml 3; ws 3	Read a job description including the pay per hour and hours per week . Have them calculate pay for a pay period (2 weeks) with calculators
Week 4	Read students the Gross Pay of an employee and the amount of withholdings. They must listen, write down numbers and subtract to find Net Pay .	10 min review: operations box worksheet	computer	ml 4: comparing weekly pay	Read students the Gross Pay of an employee and the amount of withholdings. They must listen, write down numbers and subtract to find Net Pay .

* Teachers are responsible for coming up with their own “job descriptions.” Add more or less description to the job ads to make it more or less challenging (ex: where to apply (a website or in person), a phone number to call, other benefits available, etc.)

Level 2: Mini lesson 1

Plan:

20 minutes for mini lesson (teacher led instruction)

0 minutes for individual work (student only)

10 minutes for review (class, groups, pairs)

Materials Needed:

Calculators

Mini-lesson Content:

1. Elicit prior knowledge about work and pay
 - How much do they think someone should get paid an hour—looking for an idea about wages—not a conversation about a living wage.
 - How many hours do people usually work a day (usually 6-8 for full time)
 - Elicit anything else that will be helpful in explaining daily pay.
2. Do an example together using the information from above
 - Use the money amount they suggested and the hours to write out a simple problem on the board in the same format of the worksheet. Use a student's name in the example to cut down on words they don't know.
 - Read through it together (possibly several times)
 - Write the \$ ____ + \$ ____ like the worksheet on the board. Fill in the price the number of hours worked per day.
 - Have them try entering it in their calculators. Check together. Talk about how much time it takes to “add” the time. Ask if anyone knows a faster way?
3. Introduce multiplication as a “faster way to add”
 - They type in the computer the number of hours, then “times,” then pay, then “equals” to find the answer.
 - Practice multiplying different hours/rates of pay together.

Name _____

Daily Pay

1. Mary works 8 hours a day.

She makes \$7.50 per hour.

How much does Mary make a day?

$$\text{\$ } \underline{\quad} \times \underline{\quad} \text{ hours} = \text{\$ } \underline{\quad} \text{ a day}$$

2. Tim works 6 hours a day.

She makes \$9.60 per hour.

How much does Tim make a day?

$$\text{\$ } \underline{\quad} \times \underline{\quad} \text{ hours} = \text{\$ } \underline{\quad} \text{ a day}$$

3. Tien works 4 hours a day.

She makes \$12.34 per hour.

How much does Tien make a day?

$$\text{\$ } \underline{\quad} \times \underline{\quad} \text{ hours} = \text{\$ } \underline{\quad} \text{ a day}$$

4. Van works 7 hours a day.

He makes \$15.75 per hour.

How much does Van make a day?

$$\text{\$ } \underline{\quad} \times \underline{\quad} \text{ hours} = \text{\$ } \underline{\quad} \text{ a day}$$

Level 2: Mini lesson 2

Plan:

10 minutes for mini lesson (teacher led instruction)

10 minutes for individual work (student only)

10 minutes for review (class, groups, pairs)

Materials Needed:

Calculators

Mini-lesson Content:

1. Elicit prior knowledge about work and pay
 - How many hours do people usually work a week
 - How many days in a week?...do people usually work?
 - Ask about hours for full time/part time: FT 30-40 hrs, PT 29 or fewer hrs
 - Elicit anything else that will be helpful in explaining weekly pay.
2. Do an example together using the information from above
 - Use the money amount they suggested and the hours to write out a simple problem on the board in the same format of the worksheet. Use a student's name in the example to cut down on words they don't know.
 - Read through it together (possibly several times)
 - Write the \$ ____ x ____ hours = \$ ____....see if they can fill it in.
 - Have them try entering it in their calculators. Check together.
 - Call this Gross Pay...the total amount of money you earn BEFORE taxes are taken out—to give them a heads up of what is coming next.
3. Evaluate to see if they need another class example

Name _____

Weekly Pay

1. David works 40 hours a week.

He makes \$8.25 per hour.

How much does David make a week?

$$\text{\$ } \underline{\quad} \times \underline{\quad} \text{ hours} = \text{\$ } \underline{\quad} \text{ a week}$$

2. Yen works 35 hours a week.

She makes \$7.20 per hour.

How much does Yen make a week?

$$\text{\$ } \underline{\quad} \times \underline{\quad} \text{ hours} = \text{\$ } \underline{\quad} \text{ a week}$$

3. Fatima works 10 hours a week.

She makes \$10.10 per hour.

How much does Fatima make a week?

$$\text{\$ } \underline{\quad} \times \underline{\quad} \text{ hours} = \text{\$ } \underline{\quad} \text{ a week}$$

4. Doug works 5 hours Monday, Wednesday and Friday.

He makes \$8.40 per hour.

How much does Doug make a week?

$$\text{\$ } \underline{\quad} \times \underline{\quad} \text{ hours} = \text{\$ } \underline{\quad} \text{ a week}$$

5. Laura works 4 hours Monday-Friday.

She makes \$11.05 per hour.

How much does Laura make a week?

$$\text{\$ } \underline{\quad} \times \underline{\quad} \text{ hours} = \text{\$ } \underline{\quad} \text{ a week}$$

May: Calculating Pay

Level 2: Mini lesson 3

Plan:

15 minutes for mini lesson (teacher led instruction)

10 minutes for individual work (student only)

10 minutes for review (class, groups, pairs)

Materials Needed:

Calculator

Play Money

Mini-lesson Content:

****This is an introduction to a sophisticated concept. It is meant only to be that—not a complete explanation. This introduction can prove valuable to have a basic knowledge that no one gets to keep all the money he or she makes.**

1. Explain the concept of withholdings concretely
 - Call a student up to the front. Say you are going to pay him for his work for the week. Count out all the money you are going to pay him (40 hours x \$8)—solve as a class.
 - Ask the volunteer if he/she gets all this money? Why? Why not?
 - Take a little out at a time and give it to 4 different students in class (Social Security (FICA), Medicare tax, Federal Income Tax, Minnesota Tax)—amount doesn't really matter—concept is the key.
 - Count how much money the student has left. Give it to the student as his pay.
 - Ask students to raise hands to see who knew they did/didn't get to keep all of their paychecks.
2. Introduce subtraction
 - When you take money away, you use subtraction. The name of the symbol on the calculator is “minus” –show on calculator
 - Write out the problem you just demonstrated: $\$400 - \underline{\quad} = \$ \underline{\quad}$
 - Everyone practice on calculators

May: Calculating Pay

Level 2, WS 3

Name _____

Net Pay

Withholdings: Money from your paycheck that is taken out for taxes.

Net Pay: The money you take home.

1. John makes \$425 a week.

\$52 is withheld from his pay.

What is his Net pay?

$$\text{\$ } \underline{\hspace{2cm}} - \text{\$ } \underline{\hspace{2cm}} = \text{\$ } \underline{\hspace{2cm}}$$

2. Cara makes \$350 a week.

\$39 is withheld from her pay.

What is her Net pay?

$$\text{\$ } \underline{\hspace{2cm}} - \text{\$ } \underline{\hspace{2cm}} = \text{\$ } \underline{\hspace{2cm}}$$

3. Thai works 20 hours a week. He makes \$9.25 per hour.

\$28 is withheld from his pay.

What is his Net pay?

$$\text{\$ } \underline{\hspace{2cm}} - \text{\$ } \underline{\hspace{2cm}} = \text{\$ } \underline{\hspace{2cm}}$$

4. Andy works 8 hours a day. He works Monday – Wednesday. He makes

\$7.80 per hour.

\$23 is withheld from his pay.

What is his Net pay?

$$\text{\$ } \underline{\hspace{2cm}} - \text{\$ } \underline{\hspace{2cm}} = \text{\$ } \underline{\hspace{2cm}}$$

May: Calculating Pay

Level 2: Culminating Group Activity

Plan:

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

10-15 minutes for pair/group work

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

Materials Needed:

Calculators

Activity Goal: Students will be required to show their calculating skills to compare daily vs. weekly pay. They will have to multiply and consider time specifically. Assign 3-4 people per group to solve it. Review it as class. You also have the option of completing it as a class (or the first one and they solve the second.)

Activity Description: Students work in groups to solve each job “problem.” They have to figure out how much money each person is paid to know who makes the most. They circle the box of the job that pays the most.

- Review how to figure out daily pay (hours x pay = daily pay) (AND language—“a day”)
- Review how to figure out weekly pay (hours x pay = weekly pay) (AND language)
- How do you compare? Must be the same....if you are comparing daily and weekly pay...you have to make them the same. They both must be weekly pay.
Ex: daily pay is \$60. He works Saturday and Sunday only. What is his weekly pay?
 $60 + 60$ (or 60×2).

Name _____

Comparing Pay

Circle the job that pays the most.

1.

<p>Job 1:</p> <p>Stan works 7 hours a day.</p> <p>He works Monday and Thursday and Friday.</p> <p>He makes \$15 an hour.</p> <p>His withholdings are \$25.</p>	<p>Job 2:</p> <p>Jill works 40 hours a week.</p> <p>She makes \$9.25 an hour.</p> <p>Her withholdings are \$25.</p>
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2.

<p>Job 3:</p> <p>Ted works 8 hours a day.</p> <p>He works Monday-Thursday</p> <p>He makes \$12.15 an hour.</p> <p>His withholdings are \$28.</p>	<p>Job 4:</p> <p>Blia works 40 hours a week.</p> <p>She makes \$8.50 an hour.</p> <p>Her withholdings are \$28.</p>
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May: Calculating Pay

Level 3

L3 Goals: Using hours and wage, calculate daily pay, weekly pay, and Gross Pay for the pay period. Add up withholdings and subtract them from Gross Pay to calculate Net Pay. Solve word problems and comparison problems between Gross/Net Pay.

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	computer	Read a job description including the pay per hour and hours per week . Students write down the both. Decide if they want to apply for job based on pay.	10 min review: operations box worksheet	ml 1, ws 1	Read a job description including the pay per hour and hours per week . Students write down the both and if it's a FT or PT job . Decide if they want to apply for job based on pay.
Week 2	computer	Read a job description including the pay per hour and hours per week . Have them calculate daily pay with calculators	10 min review: operations box worksheet	ml 2; ws 2	Read a job description including the pay per hour and hours per week . Have them calculate weekly pay with calculators
Week 3	computer	Read a job description including the pay per hour and hours per week . Have them calculate pay for a pay period (2 weeks) with calculators	10 min review: operations box worksheet	ml 3; ws 3	Read students the Gross Pay of an employee and the amount of withholdings. They must listen, write down numbers and subtract to find Net Pay .
Week 4	computer	Read students the Gross Pay of an employee and the 4 different withholding amounts. They must listen, write down numbers and solve for Net Pay .	10 min review: operations box worksheet	ml 4: comparing Net Pay	Read students the Gross Pay of an employee and the 4 different withholding amounts. They must listen, write down numbers and solve for Net Pay .

* Teachers are responsible for coming up with their own “job descriptions.” Add more or less description to the job ads to make it more or less challenging (ex: where to apply (a website or in person), a phone number to call, other benefits available, etc.).

Level 3: Mini lesson 1

Plan:

10 minutes for mini lesson (teacher led instruction)

10 minutes for individual work (student only)

10 minutes for review (class, groups, pairs)

Materials Needed:

Calculators

Mini-lesson Content:

1. Elicit prior knowledge about work and pay
 - How many hours do people usually work a day?; a week?
 - What is a common wage? How much per hour would they work for?
 - Ask about hours for full time/part time: FT 30-40 hrs, PT 29 or fewer hrs
 - Elicit anything else that will be helpful in explaining weekly pay...experience working? Current schedules?
2. Do an example together using the information from above
 - Use the money amount they suggested and the hours to write out a simple problem on the board in the same format of the worksheet. Use a student's name in the example to cut down on words they don't know.
 - Read through it together
 - Write the \$ ____ x ____ hours = \$ ____....see if they can fill it in.
 - Talk about paying attention to hours—is for a day –or a week –if the problem mentions a few days out of a week, what does that mean? (Part time—weekly pay).
 - Have them try entering it in their calculators. Check together.
 - Call this **Gross Pay...the total amount of money you earn BEFORE taxes are taken out**—to give them a heads up of what is coming next.

May: Calculating Pay

Level 3, WS 1

Name _____

Gross Pay

1. David works 8 hours, Monday-Friday.
He makes \$8.25 per hour.
How much does David make a week?
 $\$ \underline{\quad} \times \underline{\quad} \text{ hours} = \$ \underline{\quad} \text{ a week}$
2. Yen works 7 hours Monday and Tuesday. She works 6 hours Wednesday - Friday.
She makes \$9.20 per hour.
How much does Yen make a week?
 $\$ \underline{\quad} \times \underline{\quad} \text{ hours} = \$ \underline{\quad} \text{ a week}$
3. Fatima works 2 hours every week day from 8 a.m. to 10 a.m.
She makes \$10.10 per hour.
How much does Fatima make a week?
 $\$ \underline{\quad} \times \underline{\quad} \text{ hours} = \$ \underline{\quad} \text{ a week}$
4. Doug works 5 hours Monday, Wednesday and Friday. He works 8 hours on Saturday.
He makes \$8.40 per hour.
How much does Doug make a week?
 $\$ \underline{\quad} \times \underline{\quad} \text{ hours} = \$ \underline{\quad} \text{ a week}$
5. Laura works Monday-Friday from 1 p.m. to 5 p.m.
She makes \$11.05 per hour.
How much does Laura make a week?
 $\$ \underline{\quad} \times \underline{\quad} \text{ hours} = \$ \underline{\quad} \text{ a week}$

May: Calculating Pay

Level 3: Mini lesson 2

Plan:

15 minutes for mini lesson (teacher led instruction)

10 minutes for individual work (student only)

10 minutes for review (class, groups, pairs)

Materials Needed:

Calculator

Play Money

Mini-lesson Content:

****This is an introduction to a sophisticated concept. It is meant only to be that—not a complete explanation. This introduction can prove valuable to have a basic knowledge that no one gets to keep all the money he or she makes.**

1. Explain the concept of withholdings concretely
 - Call a student up to the front. Say you are going to pay him for his work for the week. Count out all the money you are going to pay him (40 hours x \$8)—solve as a class.
 - Ask the volunteer if he/she gets all this money? Why? Why not?
 - Take a little out at a time and give it to 4 different students in class (Social Security (FICA), Medicare tax, Federal Income Tax, Minnesota Tax)—amount doesn't really matter—concept is the key.
 - Count how much money the student has left. Give it to the student as his pay.
 - Ask students to raise hands to see who knew they did/didn't get to keep all of their paychecks.
2. Calculating withholdings
 - They have to add up all the withholdings. Then subtract the withholdings from the Gross Pay to get the Net Pay.
 - Write out the problem you just demonstrated: $\$400 - \underline{\quad} = \$ \underline{\quad}$
 - Everyone practice on calculators

May: Calculating Pay

Level 3, WS 2

Name _____

Withholdings and Net Pay

Withholdings: Money from your Gross Pay that is taken out for taxes.

You take home "Net Pay."

1. John makes \$425 a week.

FICA = \$26

Medicare = \$6

Federal Withholding = \$20

Minnesota Tax = \$14

What is his Net pay?

\$ _____ - \$ _____ = \$ _____

2. Cara works 7 hours a day, Monday-Friday. She makes \$10 per hour.

FICA = \$24

Medicare = \$4

Federal Withholding = \$18

Minnesota Tax = \$12

What is her Net pay?

\$ _____ - \$ _____ = \$ _____

3. Thai works Tuesday-Saturday from 8 a.m. to 12 p.m. He makes \$9.25 per hour.

FICA = \$11

Medicare = \$1.20

Federal Withholding = \$6

Minnesota Tax = \$4

What is his Net pay?

\$ _____ - \$ _____ = \$ _____

May: Calculating Pay

Level 3: Mini lesson 3

Plan: Longer than usual

10 minutes for mini lesson (teacher led instruction)

15 minutes for individual work (student only)

10 minutes for review (class, groups, pairs)

Materials Needed:

Calculators

Mini-lesson Content: Practice reading the question and the answer.

1. Review Components of Pay

- **Gross Pay:** The total money you earn before withholdings are taken
- Calculate the hours worked x rate of pay
- *Make sure you notice what the pay period is: 1 week? 2 weeks? 1 month?
Multiply the weekly pay accordingly to match the pay period.
- **Withholdings:** Taxes taken out (withheld) from Gross Pay
- Add withholdings together to get the total. Subtract withholdings from Gross Pay to equal Net Pay.
- **Net Pay:** The money you take home in your pay check after taxes are withheld.

Name _____

Net Pay Word Problems

1. Maria works for a retail company. The company pays its employees every two weeks. She works eight hour days Monday – Friday. She makes \$11.40 per hour. Maria notices that for this pay period the company withheld \$54 for FICA, \$8 for Medicare, \$36 for Federal withholding and \$29 for Minnesota tax.

What is Maria's Gross pay this pay period? _____

What is the total of her withholdings this pay period? _____

What is her Net Pay this pay period? _____

2. Tan works the night shift at a local gas station. He works from 11 p.m. to 4 a.m. weekend nights and two weekday nights per week. He is paid every two weeks. He earns \$16.50 per hour. This pay period Tan's pay stub showed FICA withholdings of \$15, \$3 for Medicare, \$6 for Federal withholding and \$3 for Minnesota tax.

What is Tan's Gross pay this pay period? _____

What is the total of his withholdings this pay period? _____

What is his Net Pay this pay period? _____

May: Calculating Pay

Level 3: Culminating Group Activity

Plan:

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

10-15 minutes for pair/group work

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

Materials Needed:

Calculators

Activity Goal: Students will be required to show their calculating skills to compare Pay between two people. They must solve each problem by finding the Gross pay, the total amount of withholdings and the Net pay.

Activity Description: Students work in pairs to solve each job “problem.” They have to figure out how much money each person is paid to know who makes the most. They circle the box of the job that pays the most. The first pair who finishes the worksheet correctly (with correct numbers) wins.

- Review how to figure out Gross Pay
- Review pay periods.
- Review calculating withholdings
- Review calculating Net Pay

Names _____

Comparing Pay

Circle the job that pays the most.

1.

<p>Job 1: Stan works from 10 p.m. to 5 a.m. Monday, Thursday, Friday and the Saturday. He makes \$15 an hour. He is paid every two weeks and his usual withholdings are \$68 for FICA, \$11 for Medicare, \$45 for Federal withholdings, and \$34 for Minnesota tax. What is his Net Pay? _____</p>	<p>Job 2: Jill works Monday-Friday 9 a.m. to 5 p.m. as a warehouse manager. She makes \$12.75 per hour. She is paid two times a month. Her total withholdings are \$125. What is her Net Pay? _____</p>
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2.

<p>Job 3: Ted works 8 hours Monday and Tuesday. He works half that time Wednesday-Saturday. He makes \$12.15 an hour and is paid the 1st and 15th of every month. His withholdings are \$74. What is his Net Pay? _____</p>	<p>Job 4: Blia works four 10 hour shifts a week. She makes \$9.50 an hour. She is paid twice a month. Her paystub showed that \$46 was withheld for FICA, \$5 for Medicare, \$22 for Federal withholdings and \$9 for Minnesota tax. What is her Net Pay? _____</p>
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May: Calculating Pay

Level 4

Level 4 Goals: Using hours and wage, calculate daily pay, weekly pay, and Gross Pay for the pay period. Calculate withholdings using percentages and subtract them from Gross Pay to calculate Net Pay. Solve word problems and comparison problems between Gross/Net Pay.

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	Read a job description including the pay per hour and hours per week . Students write down the both and if it's a FT or PT job . Decide if they want to apply for job based on pay.	ml 1, ws 1	10 min review: operations box worksheet	computer	Read a job description including the pay per hour and hours per week . Have them calculate daily pay
Week 2	Read a job description including the pay per hour and hours per week . Have them calculate weekly pay	ml 2; ws 2	10 min review: operations box worksheet	Computer	Read a job description including the pay per hour and hours per week . Have them calculate pay for the total pay period (2 weeks)
Week 3	Read students the Gross Pay of an employee and the amount of withholdings. They must listen, write down numbers and subtract to find Net Pay .	ml 3; ws 3	10 min review: operations box worksheet	Computer	Read students the Gross Pay of an employee and two percentages of withholdings (FICA 6.2% and Medicare 1.45%) and let them figure out the withholdings .
Week 4	Read students the Gross Pay of an employee and two percentages of withholdings (FICA 6.2% and Medicare 1.45%) and let them figure out the withholdings .	ml 4: Comparing Net Pay	10 min review: operations box worksheet	Computer	Read students the hrs/pay of an employee (to calculate Gross Pay) and two percentages of withholdings (FICA 6.2% and Medicare 1.45%) + Fed Withholding and MN withholding and let them figure out the total withholdings .

* Teachers are responsible for coming up with their own “job descriptions.” Add more or less description to the job ads to make it more or less challenging (ex: where to apply (a website or in person), a phone number to call, other benefits available, etc.).

Level 4: Mini lesson 1

Plan:

10 minutes for mini lesson (teacher led instruction)

10 minutes for individual work (student only)

10 minutes for review (class, groups, pairs)

Materials Needed:

Calculators

Mini-lesson Content:

1. Elicit prior knowledge about work and pay
 - How many hours to people usually work a day? a week?
 - What is a common wage? How much per hour would they work for?
 - Ask about hours for full time/part time: FT 30-40 hrs, PT 29 or fewer hrs
 - Elicit anything else that will be helpful in explaining weekly pay...experience working? Current schedules?
2. Do an example together using the information from above
 - Use the money amount they suggested and the hours to write out a simple problem on the board in the same format of the worksheet. Use a student's name in the example to cut down on words they don't know.
 - Read through it together and ask who knows how to solve this problem.
 - Write the \$ ____ x ____ hours = \$ ____....see if they can fill it in.
 - Talk about paying attention to hours—is for a day –or a week –if the problem mentions a few days out of a week, what does that mean? (Part time—weekly pay).
 - Have them try entering it in their calculators. Check together.
 - Call this **Gross Pay...the total amount of money you earn BEFORE taxes are taken out**—to give them a heads up of what is coming next.

May: Calculating Pay

Level 4, WS 1

Name _____

Gross Pay: Total earned money

1. David works from 8 a.m. to 4 p.m., Monday-Friday.
He makes \$8.75 per hour.
How much does David make in a two week pay period? _____
2. Yen works 7 hours Monday and Tuesday. She works 5 hours Wednesday - Friday.
She makes \$9.70 per hour.
How much does Yen make in a two week pay period? _____
3. Fatima works 2 hours every week day from 8 a.m. to 10 a.m.
She makes \$10.10 per hour.
How much does Fatima make a day? _____
How much does she make in a week? _____
How much does she make in a two week pay period? _____
4. Doug works from 4 p.m. to 8 p.m. Monday, Wednesday and Friday. He works 6 a.m. to 2 p.m. on Saturday.
He makes \$11.44 per hour.
How much does Doug make in a day? _____
How much does he make in a week? _____
How much does make in a four week pay period? _____
5. Laura works a split shift Monday-Friday from 9 a.m. to 1p.m and 4 p.m. to 9 p.m.
She makes \$14.80 per hour.
How much does Laura make in a day? _____
How much does she make in a week? _____
How much does she make in a two week pay period? _____

May: Calculating Pay

Level 4: Mini lesson 2

Plan:

15 minutes for mini lesson (teacher led instruction)

10 minutes for individual work (student only)

10 minutes for review (class, groups, pairs)

Materials Needed:

Calculator

Play Money

Mini-lesson Content:

****This is an introduction to a sophisticated concept. It is meant only to be that—not a complete explanation. This introduction can prove valuable to have a basic knowledge that no one gets to keep all the money he or she makes.**

1. Explain the concept of withholdings concretely
 - Call a student up to the front. Say you are going to pay him for his work for the week. Count out all the money you are going to pay him (40 hours x \$8)—solve as a class.
 - Ask the volunteer if he/she gets all this money? Why? Why not?
 - Take a little out at a time and give it to 4 different students in class (Social Security (FICA), Medicare tax, Federal Income Tax, Minnesota Tax)—amount doesn't really matter—concept is the key.
 - Count how much money the student has left. Give it to the student as his pay.
 - Ask students to raise hands to see who knew they did/didn't get to keep all of their paychecks.
2. Calculating withholdings
 - Two withholdings are percentages. They have to first calculate the gross pay.
 - Then they have to multiply each of the percentages (FICA 6.2% of gross pay (or .062) and Medicare 1.45% (.0145) of Gross pay).
 - Write $\text{Gross Pay} \times .062 = \text{FICA withholdings}$
 - Write $\text{Gross Pay} \times 0.0145 = \text{Medicare withholdings}$
 - Add these together with the other withholdings given.
 - Subtract the total withholdings from Gross Pay to get Net Pay (Take Home Pay)
 - Do an example together.

May: Calculating Pay

Level 4, WS 2

Name _____

Withholdings and Net Pay

Withholdings: Money from your Gross Pay (total earned money) that is taken out for taxes.

Net Pay: Your take home pay

1. John makes \$425 a week. He has a two week pay period.

$$\text{FICA} = 6.2\% = \underline{\hspace{2cm}}$$

$$\text{Medicare} = 1.45\% = \underline{\hspace{2cm}}$$

$$\text{Federal Withholding} = \$20$$

$$\text{Minnesota Tax} = \$14$$

What is his Net pay?

$$\begin{array}{rcccl} \$ \underline{\hspace{2cm}} & - & \$ \underline{\hspace{2cm}} & = & \$ \underline{\hspace{2cm}} \\ \text{Gross Pay} & & \text{Withholdings} & & \text{Net Pay} \end{array}$$

2. Cara works 7 hours a day, Monday-Friday. She makes \$12 per hour. She is paid twice a month.

$$\text{FICA} = 6.2\% = \underline{\hspace{2cm}}$$

$$\text{Medicare} = 1.45\% \underline{\hspace{2cm}}$$

$$\text{Federal Withholding} = \$18$$

$$\text{Minnesota Tax} = \$12$$

What is her Net pay?

$$\begin{array}{rcccl} \$ \underline{\hspace{2cm}} & - & \$ \underline{\hspace{2cm}} & = & \$ \underline{\hspace{2cm}} \end{array}$$

3. Thai works Tuesday-Saturday from 8 a.m. to 1 p.m. He makes \$13.25 per hour. He is paid monthly.

$$\text{FICA} = 6.2\% = \underline{\hspace{2cm}}$$

$$\text{Medicare} = 1.45\% \underline{\hspace{2cm}}$$

$$\text{Federal Withholding} = \$16$$

$$\text{Minnesota Tax} = \$7$$

What is his Net pay?

$$\begin{array}{rcccl} \$ \underline{\hspace{2cm}} & - & \$ \underline{\hspace{2cm}} & = & \$ \underline{\hspace{2cm}} \end{array}$$

May: Calculating Pay

Level 4: Mini lesson 3

Plan: Longer than usual

10 minutes for mini lesson (teacher led instruction)

15 minutes for individual work (student only)

10 minutes for review (class, groups, pairs)

Materials Needed:

Calculators

Mini-lesson Content: Practice reading the question and the answer.

1. Review Components of Pay

- **Gross Pay:** The total money you earn before withholdings are taken
- Calculate the hours worked x rate of pay
- *Make sure you notice what the pay period is: 1 week? 2 weeks? 1 month?
Multiply the weekly pay accordingly to match the pay period.
- **Withholdings:** Taxes taken out (withheld) from Gross Pay
- Multiply the percentages (.062 and .0145) to the Gross Pay to get each withholding amount.
- Add all withholdings together to get the total. Subtract withholdings from Gross Pay to equal Net Pay.
- **Net Pay:** The money you take home in your pay check after taxes are withheld.

Name _____

Net Pay Word Problems

1. Judy works for a retail company. The company pays its employees every two weeks. She works seven hour days Monday – Friday. She makes \$12.80 per hour. Judy notices that for this pay period the company withheld \$36 for Federal withholding and \$29 for Minnesota tax. She also had 6.2% held for FICA and 1.45% held for Medicare.

What is Judy's Gross pay this pay period? _____

What is the total of her withholdings this pay period? _____

What is her Net Pay this pay period? _____

2. Thai works the night shift at a local gas station. He works from 10 p.m. to 5 a.m. weekend nights and two weekday nights per week. He is paid every two weeks. He earns \$16.50 per hour. This pay period Thai's pay stub showed \$6 for Federal withholding and \$3 for Minnesota tax. He also had 6.2% held for FICA and 1.45% held for Medicare.

What is Thai's Gross pay this pay period? _____

What is the total of his withholdings this pay period? _____

What is his Net Pay this pay period? _____

May: Calculating Pay

Level 4: Culminating Group Activity

Plan:

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

10-15 minutes for pair/group work

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

Materials Needed:

Calculators

Activity Goal: Students will be required to show their calculating skills to compare Pay between two people. They must solve each problem by finding the Gross pay, the total amount of withholdings and the Net pay.

Activity Description: Students work in pairs to solve each job “problem.” They have to figure out how much money each person is paid to know who makes the most. They circle the box of the job that pays the most. The first pair who finishes the worksheet correctly (with correct numbers) wins.

- Review how to figure out Gross Pay
- Review pay periods.
- Review calculating withholdings
- Review calculating Net Pay

May: Calculating Pay

Level 4, CA

Names _____

Comparing Pay

Circle the job that pays the most.

1.

<p>Job 1:</p> <p>Paul works from 10 p.m. to 4 a.m. Monday, Thursday, Friday and the Saturday. He makes \$15 an hour. He is paid every two weeks and his usual withholdings are 6.2% for FICA, 1.45% for Medicare, \$45 for Federal withholdings, and \$34 for Minnesota tax.</p> <p>What is his Net Pay? _____</p>	<p>Job 2:</p> <p>Tran works Monday-Friday 9 a.m. to 5 p.m. as a warehouse manager. He makes \$12.98 per hour. He is paid two times a month. His total withholdings are \$125.</p> <p>What is his Net Pay? _____</p>
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2.

<p>Job 3:</p> <p>Thea works 6 hours Monday and Tuesday. She works half that time Wednesday-Saturday. She makes \$17.15 an hour and is paid the 1st and 15th of every month.</p> <p>Her withholdings for the Minnesota tax and the Federal withholdings are \$34.</p> <p>After you take out FICA and Medicare, what is her Net Pay? _____</p>	<p>Job 4:</p> <p>Blia works three 8 hour shifts a week. She makes \$19.50 an hour. She is paid twice a month. Her paystub showed that FICA withheld 6.2%, Medicare 1.45%, \$22 for Federal withholdings and \$9 for Minnesota tax.</p> <p>What is her Net Pay? _____</p>
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