# 3rd Grade Week 3

## Monday

<table>
<thead>
<tr>
<th>Subject</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English Language Arts:</strong></td>
<td>ELAGSE3RL3</td>
</tr>
<tr>
<td><strong>Math:</strong></td>
<td>MGSE3.MD.1</td>
</tr>
<tr>
<td><strong>Physical Education:</strong></td>
<td>PE3.1.a</td>
</tr>
</tbody>
</table>

**English Language Arts:**
- Print and begin *Describing Characters*

**Math:**
- Print and complete *Introduction: Tell and Write Time*

**Physical Education:**
- Locomotor Movement Assessment: Spend 10 minutes practicing the locomotion patterns of hopping, galloping, running, sliding, skipping, and jumping. Spend 10 min. having someone assess your locomotor movements with the [rubric](#). What movements do you need to improve on? Spend an extra 3-5 min practicing the movement that is the most challenging to you.

## Tuesday

<table>
<thead>
<tr>
<th>Subject</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English Language Arts:</strong></td>
<td>ELAGSE3RL3</td>
</tr>
<tr>
<td><strong>Math:</strong></td>
<td>MGSE3.MD.1</td>
</tr>
<tr>
<td><strong>Art:</strong></td>
<td>VA3.CR.1</td>
</tr>
</tbody>
</table>

**English Language Arts:**
- Complete *Describing Characters* from Monday

**Math:**
- Print and complete *Tell and Write Time Practice*

**Art:**
- Select one from the following list:
  - **Superhero Design**
    - Create a superhero and design an outfit for them. Color in with crayons, markers, oil pastels, colored pencils, etc.
  - **Hand Texture**
    - Trace your hand with a pencil or pen and fill it in with at least 6 different patterns and or textures.
  - **Color Wheel**
    - Create a color wheel using scraps of paper. Tape or glue the paper to a separate sheet of paper. Label the colors and themes.
  - **Texture Rubbing**
    - Use a crayon or pencil to create 4 different texture rubbings of textures you find in your house. Place your paper on top of the texture and rub with the side of the crayon or pencil
  - **Favorite Food Self Portrait**
    - Draw a self-portrait, of you wearing a hat made out of your favorite food. If possible, add color.
  - **Self Portrait**
    - Draw a self-portrait, of you that emphasizes one or more of your unique qualities.
  - **Who’s Got Mail**
    - Create a postcard that brings art and the state of Georgia together. If possible, send the postcard to someone through the mail.
  - **Landscape**
    - Create a landscape focusing on the weather. Include a foreground, middle ground and background. Add something that would not be expected in the season you are representing.
### 3rd Grade Week 3

#### Wednesday

<table>
<thead>
<tr>
<th>Subject</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English Language Arts:</strong> ELAGSE3RL2</td>
<td>Print and complete <a href="#">Recounting Stories</a></td>
</tr>
<tr>
<td><strong>Math:</strong> MGSE3.MD.1</td>
<td>Print and complete <a href="#">Lesson Overview: Solve Problems About Time</a></td>
</tr>
<tr>
<td><strong>Physical Education:</strong> PE3.1.a and PE3.2.a</td>
<td>One Min. Fitness Challenge: Complete the attached <a href="#">one-minute fitness challenge card</a>. See if you can complete each challenge, document how many of each exercise you did or how long each challenge took.</td>
</tr>
</tbody>
</table>

#### Thursday

<table>
<thead>
<tr>
<th>Subject</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English Language Arts:</strong> ELAGSE3RL2</td>
<td>Print and begin <a href="#">Determining the Central Message</a></td>
</tr>
<tr>
<td><strong>Math:</strong> MGSE3.MD.1</td>
<td>Print and complete <a href="#">Solve Problems About Time Practice</a></td>
</tr>
<tr>
<td><strong>Music:</strong> ESGM3.RE.1</td>
<td>Review <a href="#">String Family Information Sheet</a> Print and complete <a href="#">String Worksheet 1</a> Print and complete <a href="#">String Worksheet 2</a></td>
</tr>
</tbody>
</table>

#### Friday

<table>
<thead>
<tr>
<th>Subject</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English Language Arts:</strong> ELAGSE3RL2</td>
<td>Complete <a href="#">Determining the Central Message</a> from Thursday</td>
</tr>
<tr>
<td><strong>Math:</strong> MGSE3.MD.1</td>
<td>Print and complete <a href="#">Time Match</a> Print and complete <a href="#">Solve Time Word Problems</a></td>
</tr>
<tr>
<td><strong>Physical Education:</strong> PE3.1.a</td>
<td>Alphabet Fitness: Using the <a href="#">Alphabet Fitness</a> sheet, create and perform a 20 min. fitness circuit using your name, to make the workout longer try doing your first and last name, or even adding your middle name. <strong>Example:</strong> M-U-S-C-L-E  M - 5 Burpees  U - 15 Squats  S - 15 Mountain Climbers  C - 10 Squats  L - 10 Walking Lunges  E - 20 Mountain Climbers</td>
</tr>
</tbody>
</table>

Fulton County Schools greatly appreciates the partnership with Curriculum Associates and the permission to provide TeleSchool English Language Arts and Math lessons to students in Grades 3-5.
Lesson 6
Describing Characters

Learning Target
Understanding what characters are like, and why they act the way they do, can help you see how they drive what happens in a story.

Read  Characters are the people or animals in a story. When you read a story, think about what the characters say and do and why they act in certain ways.

Just like real people, characters have feelings. They have traits, or special qualities, such as courage, pride, or honesty. They also have motivations, or reasons for doing what they do. A character’s actions contribute, or add, to the sequence of events in a story. The sequence of events is everything that happens, in the order it happens. Each action changes the story and what happens next.

Read this cartoon and look for clues about what the giant is like.

Hi! Let me help you over the mountain.

Hi! Let me help you over the mountain.

I’ll be here when you want to go home.
**Think**  Look at the cartoon and then complete the chart below. Write one or two words that describe the giant’s traits, motivations, feelings, and actions.

<table>
<thead>
<tr>
<th>Traits</th>
<th>Motivations</th>
</tr>
</thead>
<tbody>
<tr>
<td>(What the Giant Is Like)</td>
<td>(What the Giant Wants)</td>
</tr>
</tbody>
</table>

**Character**  The Giant

<table>
<thead>
<tr>
<th>Feelings</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(How the Giant Feels)</td>
<td>(What the Giant Does)</td>
</tr>
</tbody>
</table>

**Talk**  Think about what happens in the cartoon. How do the giant’s actions contribute to the sequence of events? What would have happened if the giant had not helped the climbers?

---

**Academic Talk**

Use these words and phrase to talk about the text.

- characters  traits  sequence of events
- contribute  motivations
Voting for Her Rights

by Winnie Lujack

1 Susan B. Anthony was about to do something dangerous. She stood before a group of women listening to her speak. “We must vote,” she told them. “We must all vote!”

2 The crowded room filled with noise as some women cheered and others began to argue. “We could be arrested!” one woman cried. It was true, because in 1872, only men had the right to vote.

3 Susan said, “We likely will be arrested and put on trial. But don’t you see, we have to do it! How else will we show how much we want our voting rights?”

4 Susan marched off the stage and led the women outside. Together they went to a polling place, where men were voting for president.

5 An election worker stopped Susan. “Madam,” he said, “I can’t let you vote.”

6 “But you must,” Susan replied. “The law says that all persons born in this country are citizens. And citizens are allowed to vote.”

7 The worker looked at the group of determined women and sighed. “Very well,” he said. Susan’s friends let out a cheer. Susan entered the voting booth and cast her vote. So did fifteen other women, including three of Susan’s sisters.

8 Two weeks later, Susan and the others were all arrested for voting. But Susan wasn’t about to give up her fight for women’s rights.
How do Susan's traits, motivations, and feelings lead her to vote even though she knows she will be arrested?

**Think**

1. Complete the chart to tell what you know about Susan from the story.

<table>
<thead>
<tr>
<th>Traits</th>
<th>Motivations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Talk**

2. Using the details from the chart, discuss the way Susan's actions contribute to the sequence of events. If Susan had not led the other women, how would the story be different?

**Write**

3. **Short Response** Explain why Susan B. Anthony casts a vote even though she expects to be arrested. Use details from the text in your answer. Use the space provided on page 98 to write your answer.

**HINT** Remember to look at what Susan says as well as what she does.
Long ago, Pandora and her brother Epi were playing outside when something strange fell out of the sky and landed at Epi’s feet. It was a small box that glowed green and purple! Epi eagerly bent down to pick it up, but Pandora held him back.

“Be careful,” she warned. “I had a dream about a box like this one. In the dream, an old man warned me not to open it.”

“Aw, come on, Pandora,” Epi pleaded. “How much danger could there be in one little box? Besides, I bet there’s treasure inside. I want to find out!”

“It’s better to be safe than sorry,” Pandora warned. “Let’s go home right now—and leave the box behind.”

But as soon as Pandora turned to leave, Epi quickly opened the box. Suddenly, the sky was filled with little stinging creatures. He slammed the box shut and started swatting at them. Pandora swung around in horror.

“Oh, Epi, what have you done?” she cried out. After a short time, however, the little creatures flew off in all directions. Only then did Epi and Pandora hear a little voice coming from the closed box.

“Don’t be afraid,” the voice whispered. “I’m here to help you.”

Pandora thought carefully for a moment. Then she slowly opened the box. A tiny green and purple fairy flew out.

“I am Hope,” the fairy said. “You let all the troubles of the world out of this box, but I was put in the box to comfort the world. I will be with you always.”

Epi felt sad that he hadn’t listened to his sister. “Don’t worry, Epi,” she said kindly. “At least we have Hope.”
Think

1. At the beginning of the story, why does Epi want to open the box?
   A. He is curious to find out if the box is filled with treasure.
   B. He believes that the warning in Pandora's dream is only for her.
   C. He doesn't care if something bad happens when he opens the box.
   D. He knows that a green and purple fairy lives in the box.

2. Epi and Pandora each open the box. How do their actions change the story? Put an X by the two items that tell about the changes.
   ___ "'Let's go home right now—'"
   ___ "'You let all the troubles of the world out of this box . . .'"
   ___ "'... an old man warned me not to open it.'"
   ___ "'I bet there's treasure inside.'"
   ___ "'[Hope said,] 'I will be with you always.'"
   ___ "... something strange fell out of the sky . . ."

Talk

3. Talk about what Epi did and how his actions affected the events in the story.

Write

4. Short Response  Contrast the characters in the story. Tell what Pandora and Epi do and say that show how they are different. Use the space provided on page 99 to write your answer.
Write   Use the space below to write your answer to the question on page 95.

Voting for Her **Rights**

**3** **Short Response** Explain why Susan B. Anthony casts a vote even though she expects to be arrested. Use details from the text in your answer.

---

**HINT** Remember to look at what Susan says as well as what she does.

---

Don’t forget to check your writing.
Write  Use the space below to write your answer to the question on page 97.

Here Comes Trouble

4 Short Response  Contrast the characters in the story. Tell what Pandora and Epi do and say that show how they are different.

HINT  How does each character act when the box first appears?

Check Your Writing

☐ Did you read the prompt carefully?
☐ Did you put the prompt in your own words?
☐ Did you use the best evidence from the text to support your ideas?
☐ Are your ideas clearly organized?
☐ Did you write in clear and complete sentences?
☐ Did you check your spelling and punctuation?
Eleven-year-old Princess Cleopatra sailed the Nile River on the royal barge. Her father, the king of Egypt, played his flute.

They were sailing from their palace in Alexandria to cities along the Nile. The king would often lead important ceremonies.

Cleopatra watched for slithering crocodiles and yawning hippos. Sometimes she would catch a glimpse of a Sacred Ibis bird tiptoeing along the marshy banks.

As the royal barge sailed, people crowded the banks, hoping to see the princess and her father. They sang and chanted and threw flowers. But it bothered Cleopatra that she could not understand what they said.

Her father explained that the people of Egypt spoke Egyptian, while Cleopatra's family spoke Greek.
6  But her father was the ruler of Egypt! Why didn’t he and his family speak the native language?

7  They could thank their ancestors for that, the king said. The royal family traced its history back 250 years to the time of the Greek conqueror Alexander the Great. Alexander had conquered Egypt. When he died, his Greek general, Ptolemy, took over. Ever since, all of the rulers of Egypt had spoken Greek.

8  Once back at home, Cleopatra insisted on learning the Egyptian language. She believed that a ruler should know her people. And that meant knowing their words.

9  Cleopatra studied hard and soon learned to speak Egyptian. But she didn’t stop there. She also learned Hebrew, Aramaic, Persian, Latin, and some African dialects. She loved learning and excelled in math and science, too.

10 Later, when she ruled as queen, one of her first acts was to visit the city of Memphis for an important religious ceremony. This time, she spoke to the people in Egyptian. The people loved her for learning their language. She showed them respect and honor in many other ways, too.

11 Cleopatra is remembered as a brilliant queen. She was the only Egyptian ruler in hundreds of years to learn the language of her people.
Think  Use what you learned from reading the selection to respond to these questions.

1  This question has two parts. First, answer Part A. Then answer Part B.

Part A
What does Cleopatra find out about herself after she learns to speak Egyptian?

A  Speaking Egyptian helps her understand her religion better.
B  She no longer thinks her father is a good king.
C  Her family’s old language no longer sounds right.
D  She realizes she has a love for learning.

Part B
Choose two details from the story that support the answer to Part A.

A  “She also learned Hebrew, Aramaic, Persian, Latin, and some African dialects.”
B  “They sang and chanted and threw flowers.”
C  “But it bothered Cleopatra that she could not understand what they said.”
D  “Ever since, all of the rulers of Egypt had spoken Greek.”
E  “She loved learning and excelled in math and science, too.”

2  Why doesn’t Cleopatra’s father speak Egyptian?

A  Rulers of Egypt had spoken Greek for 250 years.
B  Alexander the Great had banned the teaching of Egyptian.
C  The king is more interested in playing the flute than learning a new language.
D  Cleopatra’s father and the Greek general Ptolemy had agreed not to speak Egyptian.
3 Which sentence **best** explains why Cleopatra wants to learn to speak Egyptian?

A  She hopes it will help her with her studies of math and science.
B  She sees the love the people show for her father and for her.
C  Her father explains the history of her family’s language.
D  She believes that as a ruler of Egypt, she should know Egyptian.

4 This question has two parts. First, answer Part A. Then answer Part B.

**Part A**
Which words **best** describe Cleopatra?

A  frightened and weak
B  spoiled and happy
C  thoughtful and caring
D  silly and careless

**Part B**
Which sentence from the story supports the answer to Part A?

A  “As the royal barge sailed, people crowded the banks, hoping to see the princess and her father.”
B  “She believed that a ruler should know her people.”
C  “She loved learning and excelled in math and science, too.”
D  “Cleopatra is remembered as a brilliant queen.”
5 Read these sentences from paragraph 6 of the story.

   But her father was the ruler of Egypt! Why didn’t he and his family speak the native language?

What does native mean in this context?
   A foreign
   B difficult
   C local
   D ancient

6 Complete the chart. Base your answers on details from the story.

<table>
<thead>
<tr>
<th>Character</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleopatra</td>
</tr>
</tbody>
</table>

| Traits |

| Actions |
Write

Short Response  The author shows that Cleopatra was a curious person. Explain how we can tell that Cleopatra was curious. Use two details from the story to support your response.

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

Learning Target

Now that you’ve practiced describing characters, write about how characters’ actions drive what happens in a story.
In this lesson, you will tell time to the minute. Take a look at this problem.

Lily started reading a book after breakfast at the time shown on the clock.

What time does the clock show?

a. The short hand on the clock shows the hour. What is the last number the short hand moved past?  

b. The long hand on the clock shows the minutes. What is the last number the long hand moved past?  

c. You can count by fives to help figure out the number of minutes. Each mark is 1 minute. Every 5 marks there is a number. If the long hand is exactly on the 6, how many minutes past 8 is it?  

d. The long hand is 2 small marks past the six. Explain how you can find the time shown on the clock.
Find Out More

It takes 1 hour for the short hour hand to move from one number to the next.

It takes 1 minute for the long minute hand to move from one mark to the next.

So, it takes 5 minutes for the minute hand to move from one number to the next.

Look at the clock at the right. The hour hand has moved past the 8, but not to the 9. So, the hour is 8.

The minute hand is between 6 and 7. Here’s how to find the number of minutes past 8:00.

- Start at 12.
- Count five for each number until you get to the 6: 5, 10, 15, 20, 25, 30.
- The minute hand is 2 marks past the 6, so count 2 more than 30: 31, 32.

When the time is between midnight and noon, the clock shows AM. When the time is between noon and midnight, the clock shows PM. Since Lily is reading the book after breakfast, the time shown is 8:32 AM.

Reflect

1 Sometimes a clock does not have numbers at all. Look at the clock below. It only has small marks and large marks. Explain how you can tell what time this clock shows.
Lesson 20  Modeled and Guided Instruction

**Learn About**  Telling Time to the Minute

Read the problem below. Then explore different ways to tell and write time.

Sara sat down to eat lunch at 43 minutes past noon. At what time did Sara sit down to eat lunch?

**Picture It**  You can use a digital clock to show what time it is.

Noon is 12:00 PM. Sara sat down at 43 minutes past noon.

The clock shows PM because the time is between noon and midnight.

**Model It**  You can also use the next hour to tell what time it is.

Sara sat down to eat between 12:00 and 1:00. You can tell the time by saying how many minutes after 12:00. You can also say how many minutes before 1:00.

To count the minutes, you always start at the 12.

- **Count forward** to find out how many minutes after 12:00.
- **Count backward** from the 12 to find out how many minutes before 1:00.

By counting backward, you can see that **43 minutes after 12:00** describes the same time as **17 minutes before 1:00**.
**Connect It**  Now you will show the time from the problem on the previous page by drawing the hands on a clock.

2 Which hand on a clock shows the hour? ________________

What two numbers should this hand be between to show the time Sara sat down to eat? ________________

Explain how you know. ________________

3 Which hand on a clock shows the minutes? ________________

How many minutes should this hand show? ________________

4 At what time did Sara sit down to eat? ________________

5 Draw the hands on the clock to show the time Sara sat down to eat.

6 Explain how to tell time to the minute on a clock with hands.

   ________________

**Try It**  Use what you just learned to solve these problems.

7 Write the time in two ways.

   ________________

   ________ minutes before ________

8 It is 7 minutes before 2 PM. Draw the hands on the clock to show the time.

   Write the time. ________________
Study the example below. Then solve problems 9–11.

**Example**

Jen woke up at the time shown on the digital clock below. What time did she wake up? Give your answer in minutes before the next hour.

![Digital clock showing 6:42 AM]

**Look at how you could show your work using a clock.**

1. The student first drew the hands on a clock. Then she counted backward from the 12 to find the number of minutes before the next hour.

**Solution** 18 minutes before 7:00

9. Ezra started working in the garden at the time shown on the digital clock below.

![Digital clock showing 10:24 AM]

Draw the hands to show what the time looks like on this clock.
10. Abby’s piano lesson started at the time shown on the clock.

Think about what Abby is doing. Would she most likely have a piano lesson when it is AM or PM?

Fill in the correct time on the digital clock. Be sure to show whether it is AM or PM.

Pair/Share

11. Luca started cleaning his room at the time shown on the clock.

What is something else you might be doing at the time shown?

All of the choices tell the time before the hour. What do you need to do to figure that out?

Which tells the time shown on the clock? Circle the letter of the correct answer.

A 9 minutes before 9:00
B 9 minutes before 10:00
C 11 minutes before 10:00
D 51 minutes before 9:00

Bo chose D as the correct answer. How did he get that answer?

Pair/Share

Does Bo’s answer make sense?
Solve the problems.

1 Which pair of clocks shows the same time?

A

B

C

D

2 Which phrases describe the time shown on the clock below? Circle the letter for all that apply.

A 48 minutes after 5:00
B 48 minutes before 5:00
C 48 minutes before 6:00
D 12 minutes before 5:00
E 12 minutes before 6:00
F 12 minutes after 6:00
3 Adam started baseball practice at the time shown on the digital clock below.

![Digital clock showing 5:10 PM]

Draw the hour and minute hands on the clock below to show the time that Adam started baseball practice.

![Analog clock with hour hand pointing to 5 and minute hand pointing to 10]

4 Ruby left to go swimming this morning at the time shown on the clock below.

![Analog clock showing a time before 12 noon with the minute hand pointing to 30 minutes]

Write the time on the digital clock below. Be sure to mark AM or PM. Then tell the time before the hour. Show your work.

Answer  Ruby left _______ minutes before _______.

Self Check  Go back and see what you can check off on the Self Check on page 211.
<table>
<thead>
<tr>
<th>Criteria</th>
<th>4 pts</th>
<th>3 pts</th>
<th>2 pts</th>
<th>1 pt</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOPPING</td>
<td>Hops all of the time using one foot with bent knee and lands on the ball of the foot</td>
<td>Hops most of the time using one foot with bent knee and lands on the ball of the foot</td>
<td>Hops some of the time on one foot with bent knee</td>
<td>Unable to demonstrate a hop on one foot</td>
</tr>
<tr>
<td>Uses one foot</td>
<td>Gallups all of the time with one foot leading while the other foot chases the lead foot and has bent knees</td>
<td>Gallups most of the time with one foot leading while the other foot chases the lead foot</td>
<td>Gallups some of the time with one foot leading</td>
<td>Unable to demonstrate a gallop with one foot leading</td>
</tr>
<tr>
<td>Bends knee</td>
<td>Runs all of the time on the balls of the feet moving arms in opposition to legs and both feet come off the ground</td>
<td>Runs most of the time on balls of the feet moving arms in opposition to legs</td>
<td>Runs some of the time on balls of feet moving arms</td>
<td>Unable to demonstrate a run on the balls of the feet</td>
</tr>
<tr>
<td>LEDS ON BALL OF FOOT</td>
<td>Slides all of the time in a sideways movement while one foot chases the other with the same lead foot</td>
<td>Slides most of the time in a sideways movement while one foot chases the other</td>
<td>Slides some of the time in a sideways movement while one foot chases the other</td>
<td>Unable to demonstrate a slide in a sideways movement</td>
</tr>
<tr>
<td>GALLOPING</td>
<td>Skips all of the time in a step-hop motion alternating feet while arms swing upward with legs</td>
<td>Skips most of the time in a step-hop motion alternating feet</td>
<td>Skips some of the time in a step-hop motion alternating feet</td>
<td>Unable to demonstrate a skip in a step-hop motion</td>
</tr>
<tr>
<td>SKIPPING</td>
<td>Jumps all of the time with bent knees using two feet and landing on balls of the feet</td>
<td>Jumps most of the time with bent knees using two feet</td>
<td>Jumps some of the time on two feet with bent knees</td>
<td>Unable to demonstrate a jump with two feet</td>
</tr>
</tbody>
</table>
Prerequisite: Tell Time to 5-Minute Intervals

Study the example problem showing how to skip count to tell time. Then solve problems 1–6.

Example

The clock shows the time that Julian finished his guitar practice. What time did his practice end?

The hour hand is past the 4, but it isn’t at the 5 yet. The minute hand points to the 7. Skip count by fives 7 times to find the minutes.

5, 10, 15, 20, 25, 30, 35

The clock shows 35 minutes after 4 o’clock.

Julian’s guitar practice ended at 4:35.

Draw lines to match clocks that show the same time.

1

[Clocks and alarm clocks showing different times]
Write the time on the clocks so that each pair of clocks shows the same time.

2

3

4

Draw hour and minute hands so that each pair of clocks shows the same time.

5

6
Tell Time to the Minute

Study the example problem showing how to tell time to the minute. Then solve problems 1–9.

Example

What time does the clock show?

The hour hand shows that it is between 3 o’clock and 4 o’clock. It takes 5 minutes for the minute hand to move from one number to the next. It takes 1 minute for the minute hand to move from one mark to the next.

Count by fives from the 12 to the 7. Then count 2 more minutes.

The clock shows 37 minutes after 3, or 3:37.

1 Look at the red arrows on the clock. Count by fives and by ones to find the minutes before 4:00. Fill in the blanks.

5, 10, ______, ______, 21, ______, ______

______ minutes before __________

Write the time in two ways.

2 __________

______ minutes before __________

3 __________

______ minutes before __________
Write the time on the clock so that each pair of clocks shows the same time.

Draw the hands on the clock to show the time.

6. It is 13 minutes after 4.
7. It is 13 minutes before 7.

8. Write the time in three ways.
   
   ________
   _______ minutes after _________
   _______ minutes before ________

   What time will it be in 24 minutes?
   Draw hands on the clock to show that time.
Tell and Write Time

Solve the problems.

1. Which phrases describe the time shown on the clock? Circle the letter for all that apply.
   A. 43 minutes after 7:00
   B. 43 minutes before 7:00
   C. 43 minutes before 8:00
   D. 17 minutes before 7:00
   E. 17 minutes before 8:00
   F. 17 minutes after 7:00

   A. 19 minutes before 10:00
   B. 19 minutes before 11:00
   C. 41 minutes before 10:00
   D. 41 minutes before 11:00
   
   Josh chose B as the correct answer. How did he get that answer?
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________
Solve.

3. Enrique left the science center at 12 minutes before 3:00. Draw hands on the clock to show this time.

4. Kamala got home from her jazz dance lesson at the time shown on the clock. Write the time in two ways.

5. Chen ate breakfast this morning at the time shown on the clock.

   Write the time on the digital clock. Mark A.M. or P.M. Then tell the time before the hour.

   _____ minutes before _________
Lesson 7
Recounting Stories

Learning Target
Retell or recount stories from around the world by telling key events in the order in which they happened.

Read When you recount a story, you are retelling the story in your own words. Be sure that you include the key details and events that happened in the beginning, middle, and end. Tell the events in the sequence, or order, in which they happened.

Read this story. Think about what happens at the beginning, middle, and end. Then reread the story. What are the most important details?

A Bundle of Sticks

Long ago, a mother had three children who were always arguing. “Your arguing sounds worse than the clucking of all the hens in the world,” their mother told them. She wanted them to stop!

One day she got an idea. She gathered the children around her. Then she took a stick and broke it. “See how easy it is to break one stick?” she asked. Then she tied three sticks together. She asked each child to try to break the sticks. None of the children could break the bundle.

The mother told the children, “We’re just like the sticks. When we don’t stay together, our family is weak. When we stay together, nothing can break us apart.”

The children understood! From that day forward, they didn’t argue (as much).
Think  The chart below will help you to organize the most important details of a story. Think about what happened in the beginning, middle, and end of the story. Then add those details to the chart.

Beginning  

Middle  

End

Talk  Using the key details in your chart, retell the story to your partner.

Academic Talk  Use these words to talk about the text.

- recount  
- sequence  
- character  
- setting  
- events
Brother and Sister

a folktale from Korea

Long ago, a brother and sister grew rice to sell. Through the long summer, they worked together to care for the rice paddies. In the fall, they harvested all the rice and put the rice into bags. Each got the same number of bags.

After one harvest, the brother announced he was soon to be married. The sister knew her brother would need money to buy a new house for his bride. She didn’t feel the rice was divided fairly, so that night, she took an extra bag of rice to her brother’s house in secret.

The brother, too, felt the rice was not divided fairly. His sister had a large family. She would need more rice. So that night, the brother took an extra bag to his sister’s house in secret.

The next day, the brother and sister counted their rice bags. Strange! Both had the same number as before. So that night, when the moon was full, they made another attempt. In the moonlight, the brother and sister each saw the other carrying a bag of rice! They laughed. The mystery was solved.
Explore How do you choose which details to include when you recount a story?

Think

1 Recount the folktale “Brother and Sister” by adding key details to the chart below.

<table>
<thead>
<tr>
<th>Beginning</th>
<th>A brother and sister grow and sell rice. They each get the same number of bags of rice.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle</td>
<td>Sister</td>
</tr>
<tr>
<td>End</td>
<td>Brother</td>
</tr>
</tbody>
</table>

To decide whether a detail is important, think about whether the story makes sense without it.

Talk

2 Using the details from your chart, take turns retelling the story with your partner.

Write

3 Short Response Which details from the chart do you think are most important? List them and tell why you chose them. Use the space provided on page 112 to write your answer.

HINT What details would you need to help a friend understand what happens in the story?
A long time ago, the bat was a tiny mammal. It had no wings. One day, the mammals and birds decided to play a game. The birds played on one team, and the mammals played on the other team.

The bat wanted to play with the mammals, but the mammals laughed at her size. “You are too small,” they said.

So the bat asked to play with the birds. The birds said, “You don’t have wings, but we can make you some out of a drum.” The birds stretched the skin of a drum into wings.

The birds put the wings on the bat and said, “Flap your wings.” The bat jumped off a tree and flapped her wings, but she didn’t fly in a straight line like the birds. Instead, she flew every which way in a crazy, zigzag pattern.

The birds let the bat play on their team. Just as she had done before, the bat flew in a crazy, zigzag pattern. The mammals on the other team could not catch the bat. The bat scored the winning points for the birds.

When the game was over, the mammals said, “Who is that superstar on your team?”

The birds said, “It is the bat. We gave her wings.”

The mammals did not know what to say. After all, they had refused to let the tiny bat play on their team. The mammals had learned their lesson. From that day on, they let any animal of any size play on their team.
Think

1 Number the items to show the order of some events in the story.
   _____ The bat flies in a crazy, zigzag pattern.
   _____ The birds make wings for the bat.
   _____ The mammals do not let the bat play on their team.

2 Why do the birds win the game?
   A The mammals cannot follow the bat’s movements.
   B The mammals are surprised to see the bat on the team.
   C The mammals refuse to play against a bat.
   D The birds fly in a crazy, zigzag pattern.

Talk

3 Using key details from the text, talk to your partner about how the bat’s way of flying helps the birds win.

Write

4 Short Response In your own words, recount what happens when the bat plays the game with the birds. Be sure to include the most important details from the story. Use the space provided on page 113 to write your answer.

HINT Review the game in paragraphs 5 to 8.
Brother and Sister

Short Response  Which details from the chart do you think are most important? List them and tell why you chose them.

HINT: What details would you need to help a friend understand what happens in the story?
**HOW THE BAT GOT WINGS**

4 Short Response  In your own words, recount what happens when the bat plays the game with the birds. Be sure to include the most important details from the story.

[Blank lines for writing]

**Check Your Writing**

- Did you read the prompt carefully?
- Did you put the prompt in your own words?
- Did you use the best evidence from the text to support your ideas?
- Are your ideas clearly organized?
- Did you write in clear and complete sentences?
- Did you check your spelling and punctuation?
There once were three poor brothers who loved to tell tall tales. They traveled throughout the countryside telling wild stories. They always claimed that their tales were true, but no one ever believed them.

One day, the three brothers met a rich traveler. The man was dressed in fine clothes and wore shining jewels. The brothers wanted his things. “Let’s ask him to play a game. Each of the four of us will tell a tale of a past adventure. The rule is that if anyone doubts the truth of another’s story, he must become that person’s servant. The man will never believe our stories. Getting him to doubt our stories will be like rolling off a log. He will have to become our servant.”

The others liked this plan. They did not want a servant. But they wanted the man’s fine things. The man agreed to the game.

The first brother told a story of how he had climbed a tree and could not get down. So he ran to a nearby cottage and borrowed a rope.

The second brother told of jumping into the stomach of a tiger who wanted to eat him. “I made such a fuss that the tiger spit me out,” he said.
6 The third told of helping the village fishermen. He said he turned into a fish and jumped into the river. There, he turned back into a man and killed the big fish that were eating all the little fish.

7 The rich man listened to the three tales without saying one word of disbelief. Then he told his story. He said he was searching for three servants who had run away from him.

8 “You three must be the ones I am looking for,” he said.

9 The brothers looked at him with alarm. If they doubted him, they must become his servants. That was their rule. But if they said his story was true, they would have to become his servants too!

10 They said nothing.

11 Finally, the man said he would let them go if they promised never to tell tall tales again.

12 The brothers agreed, and they kept their promise.
Think  Use what you learned from reading the selection to respond to these questions.

1 Number the items to show the order of some events in the story.

   ____ Each brother told his make-believe story.
   ____ Three brothers talked a rich traveler into playing a game.
   ____ The rich man made them promise not to tell tall tales.
   ____ The rich man told them a story.
   ____ The rich man did not question the brothers’ stories.
   ____ The brothers realized they were trapped.

2 This question has two parts. First, answer Part A. Then answer Part B.

Part A
Why did the three brothers want to play a game with the traveler?

   A  They wanted to see if he would believe their tall tales.
   B  They wanted to trick him so they could have what he owned.
   C  They disliked people who had more money than they did.
   D  They were once the rich traveler’s servants.

Part B
Write a sentence from paragraph 2 that supports the answer you chose for Part A.
3. Which is the best recounting of the third brother’s story?

A. He plays a trick on the fishermen. He pretends to be a big fish catching small ones.
B. He gets away from the fishermen by swimming in the river like a fish.
C. He helps the fishermen. He turns himself into a fish and then back into a person to kill a big fish.
D. He becomes a fish so that he can help the fishermen chase fish into their nets.

4. Which is the best description of the brothers’ problem at the end of the folktale?

A. The brothers think the rich man’s story is the best of all the stories they have heard.
B. The rich man believes that the brothers are the runaway servants he is looking for.
C. The brothers promise never to tell tall tales again as they know they should not be doing that.
D. No matter how the brothers answer the rich man, they will have to become his servants.
Which two details could you leave out when recounting this story?

A. The brothers tell their tales throughout the countryside.
B. The brothers ask a rich traveler to play a game.
C. A tiger spit one brother out after eating him.
D. The rich man said nothing about the brothers’ stories.
E. The rich man told a story about missing servants.
F. The brothers agreed not to tell any more tall tales.

Reread these sentences from paragraph 2.

The man will never believe our stories. Getting him to doubt our stories will be like rolling off a log.

What does the word doubt mean in this context?

A. dislike
B. understand
C. mistrust
D. enjoy
Write

7 Short Response  Use your own words to recount the folktale. Be sure to write about the events in the sequence that they happen in the story.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Learning Target

Explain why recounting the events in a story will help you understand it.
Lesson 21
Solve Problems About Time

Prerequisite Skills

- Tell time to the nearest minute.
- Add and subtract two-digit numbers.
- Count by fives and ones.

Lesson Vocabulary

- **elapsed time** - the time that has passed between a start time and an end time.

Lesson Objectives

**Content Objectives**

- Measure time intervals in minutes using clock models and number lines.
- Solve word problems involving addition of time intervals in minutes.
- Solve word problems involving subtraction of time intervals in minutes.

**Language Objectives**

- Find elapsed time.
- Tell how to find the ending time when the start time and total elapsed time are given.
- Tell how to find the start time when the ending time and total elapsed time are given.
- Restate a word problem to tell whether it is asking for elapsed time, start time, or ending time, and choose an appropriate strategy for solving.

Learning Progression

**In the previous lesson** students learned to tell time to the nearest minute, including telling time before and after the hour.

**In this lesson** students apply these skills to measuring time intervals in minutes, as well as to solving problems involving addition and subtraction of time intervals. Students reason about the relationship between start time, elapsed time, and end time, using models of clocks and number lines. Given a start time and intervals of elapsed time, students determine the end time. Conversely, given an end time and intervals of elapsed time, students determine the start time.

An understanding of time intervals and elapsed time provides a foundation for **Grade 4** in which students will solve multi-step word problems about time that also involve converting larger units of time to smaller units (e.g., hours to minutes, minutes to seconds).

Domain
Measurement and Data

Cluster
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Standard
MGSE3.MD.1

Standards for Mathematical Practice (SMP)
1 Make sense of problems and persevere in solving them.
4 Model with mathematics.
5 Use appropriate tools strategically.
6 Attend to precision.

MGSE Focus

Domain
Measurement and Data

Cluster
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Standard
MGSE3.MD.1

Standards for Mathematical Practice (SMP)
1 Make sense of problems and persevere in solving them.
4 Model with mathematics.
5 Use appropriate tools strategically.
6 Attend to precision.
### Whole Class Instruction

#### Day 1
45–60 minutes

**Toolbox: Interactive Tutorial**
Solve Problems About Time

- **Introduction**
  - Use What You Know 10 min
  - Find Out More 20 min
  - Reflect 5 min

**Practice and Problem Solving**
Assign pages 233–234.

#### Day 2
45–60 minutes

**Modeled and Guided Instruction**
Learn About Finding the End Time in Word Problems

- Picture It/Model It 15 min
- Connect It 20 min
- Try It 10 min

**Practice and Problem Solving**
Assign pages 235–236.

#### Day 3
45–60 minutes

**Modeled and Guided Instruction**
Learn About Finding the Start Time in Word Problems

- Picture It/Model It 20 min
- Connect It 15 min
- Try It 10 min

**Practice and Problem Solving**
Assign pages 237–238.

#### Day 4
45–60 minutes

**Guided Practice**
Practice Solving Problems About Time

- Example 5 min
- Problems 13–15 15 min
- Pair/Share 15 min
- Solutions 10 min

**Practice and Problem Solving**
Assign pages 239–240.

#### Day 5
45–60 minutes

**Independent Practice**
Practice Solving Problems About Time

- Problems 1–6 20 min
- Quick Check and Remediation 10 min
- Hands-On or Challenge Activity 15 min

**Toolbox: Lesson Quiz**
Lesson 21 Quiz

### Small Group Differentiation

#### Teacher-Toolbox.com

#### Reteach

**Ready Prerequisite Lessons** 45–90 min

- **Grade 1**
  - Lesson 34 Tell Time
- **Grade 2**
  - Lesson 24 Tell and Write Time

#### Teacher-led Activities

**Tools for Instruction** 15–20 min

- **Grade 1** (Lesson 34)
  - Telling Time to the Hour and Half Hour
- **Grade 2** (Lesson 24)
  - Telling Time to the Nearest Five Minutes
- **Grade 3** (Lesson 21)
  - Elapsed Time

#### Student-led Activities

**Math Center Activities** 30–40 min

- **Grade 2** (Lesson 24)
  - Telling Time to 5 Minutes
  - Telling Time to 15 Minutes
- **Grade 3** (Lesson 21)
  - 3.32 Solve Time Word Problems

#### Personalized Learning

**i-Ready.com**

**Independent**
**i-Ready Lessons** 10–20 min

- **Grade 2** (Lesson 24)
  - Telling Time Vocabulary
  - Telling Time from Analog and Digital Clocks
- **Grade 3** (Lesson 21)
  - 3.32 Solve Time Word Problems

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*We continually update the Interactive Tutorials. Check the Teacher Toolbox for the most up-to-date offerings for this lesson.*
Students read a word problem and answer a series of questions designed to help them find elapsed time. Then students use clocks and number lines to help them understand elapsed time.

**Step By Step**

- Work through **Use What You Know** as a class.
- Tell students that this page models how to find the time that has elapsed between a start time and an end time.
- Have students read the problem at the top of the page.
- Ask students to explain how they figured out the number of minutes before and after 5:00 for the two times given.
- Ask student pairs or groups to discuss the remaining question. Invite them to share their answers.

**Mathematical Discourse 1 and 2**

**Hands-On Activity**

**Mathematical Discourse**

1. **What is another way you could solve the problem?**
   Student responses may include counting by fives starting at the 6 and continuing around the clock to the 1 (or backward from the 1 to the 6).

2. **The hour on the digital clock changed from 4 to 5. Why isn’t the answer more than one hour?**
   Student responses should indicate an understanding that just because the hour number changes, it does not mean that a full hour has gone by. The elapsed time from 4:59 to 5:00 is only 1 minute, but the hour number increases by 1 hour.

**Hands-On Activity**

**Use a stopwatch and a clock to find elapsed time.**

**Materials:** stopwatches (1 per group of 3 students)

- Make a list of activities that students could time during the day (math lesson, lunch period, recess, free reading time, etc.).
- One student in each group should record the start time of each activity, one student should record the end time of each activity, and one student should use the stopwatch to time each activity from start to end.
- Once all activities are complete, students in each group should get together to figure out the elapsed times based on the start and end times they recorded. Then they compare their answers with the elapsed times recorded using the stopwatch.
Find Out More

Elapsed time is the time that has passed between a start time and an end time. Here are three ways you could find elapsed time in this problem.

- You can count by fives on a clock. At 4:30, the minute hand is on the 6. At 5:05, the minute hand is on the 1. It took Beth 35 minutes to get from her house to dance class.
- You can add. Think about the elapsed time as the minutes before 5:00 plus the minutes after 5:00. 4:30 is 30 minutes before 5:00. 5:05 is 5 minutes after 5:00. 30 minutes + 5 minutes = 35 minutes.
- You can also use a number line. Each long mark on the number line below shows 5 minutes. Count minutes on the number line just like you would count minutes on a clock.

Reflect

1. Elsa started eating lunch at 11:25 and finished at 11:45. Explain how to find how long it took Elsa to eat lunch. Possible answer: At 11:25, the long hand is on the 5. At 11:45, the long hand is on the 9. Start at the 5 on the clock and count by fives to the 9 on the clock: 5, 10, 15, 20. It took Elsa 20 minutes to eat lunch.

Real-World Connection

- Point out that counting elapsed time on a number line is very similar to counting it on a clock.

Concept Extension

- Discuss students’ answers to the Reflect problem.

Step By Step

- Read Find Out More as a class.
- Have students use their fingers to trace the jumps around the outside of the clock to practice counting to find elapsed time.
- Discuss how to use time before and after the hour to write an addition problem to find the answer. Point out that the answer is the same as when they counted the minutes around the clock.
- Emphasize that this addition method is only used when the times are in consecutive hours (hours that follow one after the other). Give examples of situations where it would not work. (4:30 to 4:45 is not 30 + 45 = 75 minutes or 4:30 to 6:05 is not 30 + 5 = 35 minutes.) Discuss alternate ways to find elapsed time in those situations.

Assign Practice and Problem Solving pages 233–234 after students have completed this section.
Students use clocks and a number line to model a problem involving adding three time intervals to find the end time. Students revisit this problem to learn how to find the end time when the start time and the amount of elapsed time is known.

**Step By Step**

- Read the problem at the top of the page as a class.

**Picture It**

- Have students trace the jumps around the clock with their fingers as they count aloud the time for each activity. Have a volunteer explain why the hour hand moved from the 3 to the 4, even though the elapsed time was less than an hour. [Because the minute hand went past the 12.]

**Model It**

- Read Model It together as a class. Discuss that the number line shows the same information as the clock model above, just in a different way.
- You may wish to draw the number line on the board and draw the jumps to mirror those shown on the clock. (5, 10; 5, 10, 15; 5, 10, 15, 20, 21, 22)

**Mathematical Discourse**

1. **Which model do you prefer to use to help solve the problem? Explain why.**
   Students may choose either model. They should justify their choice with why that method is more helpful to them.

2. **What is another way you could solve this problem?**
   Student responses may include using an equation to find the total elapsed time (47 minutes) before starting to count from 3:30. They may also describe breaking up the total elapsed time of 47 minutes into chunks of 30 and 17 minutes to help them find the end time mentally.
Connect It  Now you will find the end time for the problem from the previous page.

2 Explain how to figure out the total elapsed time from the number of minutes Jenna spent doing her homework and practicing the piano.  Possible answer:  Add 10 + 15 + 22 to get 47.

3 Explain how you can use the total elapsed time to find Jenna’s end time for doing her homework and practicing the piano.  Possible answer:  Start at 3:30 on the clock and count 47 minutes around the clock.

4 What time did Jenna finish?  4:17  Why is the hour now 4, instead of 3?  Possible answer:  The minute hand moved past the 12 so the hour changed from 3 to 4.

5 Explain how to find the end time when you know the start time and the total elapsed time.  Possible answer:  From the start time, you count around the clock the number of minutes equal to the elapsed time. Where you end up on the clock is the end time. If you count past the 12, you have to add 1 to the hour.

Try It  Use what you have learned about finding the end time to help you solve these problems. Show your work on a separate sheet of paper.

6 Nate finished dinner at 7:10. He did dishes for 15 minutes and then took a shower for 10 minutes. Then he read for 15 minutes before he went to bed. What time did Nate go to bed?  7:50  Solution

7 Kari started a phone call to her family at 5:45. She talked to her grandma for 10 minutes, then her grandpa for 5 minutes, and then her cousin for 8 minutes. What time did Kari end the call?  6:08  Solution

Error Alert  Students who wrote 8:50 mistakenly advanced the hour.

SMP TIP  Make Sense of Problems

Considering a simpler form of the original problem is one way students can make sense of problems and persevere in solving them. By having students use a start time of 3:00, they can gain insight into when and why they need to advance the hour in problems involving elapsed time. Throughout the rest of the lesson, ask students to consider the problem situation using a different start or end time.  (SMP 1)

• Have students share their responses to problem 5 with a partner.

Try It

6 Solution  7:50; Students may write an equation to find the total elapsed time of 40 minutes and then draw jumps around the clock to find the end time.

Error Alert  Students who wrote 8:50 mistakenly advanced the hour.

7 Solution  6:08; Students may write an equation to find the total elapsed time of 23 minutes and then draw jumps on the number line to find the end time.

Assign Practice and Problem Solving pages 235–236 after students have completed this section.
Lesson 21  Solve Problems About Time

Modeled and Guided Instruction

At A Glance

Students use clocks and a number line to model a problem involving subtracting time intervals to find the start time. Then students revisit this problem to learn how to find the start time when the end time and the amount of elapsed time is known.

Step By Step

- Read the problem at the top of the page as a class.

▶ English Language Learners

Picture It

- Have students trace the jumps backward around the clock with their fingers as they count aloud the time for each activity. Have a volunteer explain why they are now going backward around the clock instead of forward like they did on the previous page. [Because you know the end time and you have to count backward to find the start time.]

- Ask: Why did the hour change from 5 to 4? [Because the minute hand went backward over the 12.]

▶ Mathematical Discourse 1

Model It

- Explain that the number line shows the same information as the clock model above, just in a different way.

- You may wish to draw the number line on the board and draw the jumps to mirror those shown on the clock. (5, 10, 15; 5, 10, 15, 20, 25)

▶ Mathematical Discourse 2

▶ English Language Learners

1 The end time (when Marc needs to be at his guitar lesson) is 20 minutes after 5:00. Why can’t you just subtract the total number of minutes for the two activities from 20 minutes?

   Students’ responses should indicate an understanding that the total elapsed time is greater than 20 minutes, so it would require them to regroup if they used a subtraction equation.

2 Explain how finding an unknown start time is different from finding an unknown end time.

   Responses may include you need to count backward to find an unknown start time, but you need to count forward to find an unknown end time.

Read the problem below. Then explore different ways to find the start time when you know the end time and the amount of elapsed time.

Marc’s guitar lesson starts at 5:20. It takes Marc 15 minutes to get to his lesson from his house. Before Marc leaves, he has to do chores for 25 minutes. What time should Marc start doing his chores to get to his lesson on time?

▶ Picture It

You can use a clock to help you find the start time.

The clock shows 5:20, because that is when Marc’s guitar lesson starts. Count 15 minutes backward for the time it takes to get to his lesson. Then count 25 minutes backward for the time it takes him to do his chores.

The second clock shows the time Marc should start doing his chores.

▶ Model It

You can also use a number line to help you find the start time.

The number line below is like the one used for the last problem. It shows times in hours and minutes. Each long mark shows 5 minutes. Each short mark shows 1 minute.

Start at 5:20. Count back the number of minutes it takes Marc to get to his lesson and do his chores.

At A Glance

- Students may be confused when trying to identify the end time in this problem because the sentence uses the word “starts”—“Marc’s guitar lesson starts at 5:20.”

- Discuss with students that even though the sentence uses the word “start,” that does not mean it is the start time they are looking for as the answer.

- Emphasize that the start time of the guitar lesson is the same as the end time of the other activities.
Lesson 21
Solve Problems About Time

Concept Extension
Understand number lines as a mathematical tool.
• Draw three different number lines on the board: one that shows whole numbers from 0 to 10, one that shows fourths from 0 to 2, and one that shows times from 12:00 to 12:30.
• Discuss with students how the number lines are the same [all show numbers in order] and how they are different [each shows a different type of number].
• Discuss how number lines can be useful tools when solving problems.

Step By Step

Connect It
Now you will find the start time for the problem from the previous page.

1. Explain why the times are counted backward from 5:20 on the clock and on the number line. Possible answer: 5:20 is the time we need to end at. To find the beginning time, you have to count backward.

2. What time should Marc start doing his chores? 4:40
   Possible answer: The minute hand moved backward over the 12, so the hour changed from 5 back to 4.

3. Explain how to find the start time when you know the end time and the elapsed time. Possible answer: First, you find the total elapsed time. Then, use a clock or number line to help you count backward the total number of minutes to find the starting time.

Try It
Use what you’ve learned about finding the start time to help you solve these problems. Show your work on a separate sheet of paper.

11. Enrique walked 5 minutes from his grandma’s house to the store, stopped at the store for 20 minutes, and then walked 10 minutes from the store to his house. He got to his house at 6:00. What time did he leave his grandma’s house? 5:25

12. Mira finished making fruit slices and sandwiches for lunch at 12:30. She cut up fruit for 10 minutes and made sandwiches for 7 minutes. What time did she start making lunch? 12:13

Try It

• Have students work on the Try It problems. Discuss the solutions with the class.

11. Solution
   5:25; Students may write an equation to find the total elapsed time of 35 minutes and then draw jumps backward around the clock to find the start time.

   Error Alert
   Students who wrote 6:35 mistakenly counted forward instead of backward around the clock.

12. Solution
   12:13; Students may write an equation to find the total elapsed time of 17 minutes and then draw jumps backward on the number line to find the start time.

Assign Practice and Problem Solving pages 237–238 after students have completed this section.
Lesson 21  Solve Problems About Time

Guided Practice

At A Glance

Students use clocks, number lines, and equations to solve problems about elapsed time.

Step By Step

- Ask students to solve the problems individually and show how they figured out the answer using a clock, number line, or equation.
- **Pair/Share** When students have completed each problem, have students discuss their solutions with a partner or in a group. Also, have them discuss the Pair/Share questions that correspond with each item.

Solutions

**Example** Writing an equation is shown as one way to solve the problem. Students could also draw a clock or number line and count the elapsed time.

**Solution**

1:42; Students may use an equation to find the total elapsed time and then draw jumps backward around the clock to find the start time.

DOK 2

Example

Malea’s soccer game started at 9:40 and ended at 10:32. How long was Malea’s soccer game?

**Look at how you could show your work.**

- 9:40 is 20 minutes before 10:00.
- 10:32 is 32 minutes after 10:00.
- \( 20 + 32 = 52 \)

**Solution** 52 minutes

Lamar watched his little sister while his mom was busy. He played blocks with her for 15 minutes, peek-a-boo for 5 minutes, and trains for 13 minutes. His mom came back to put his sister down for a nap at 2:15. What time did Lamar start watching his sister?

**Show your work.**

Possible student work using an analog clock:

\[
15 + 5 + 13 = 33
\]

**Solution** 1:42

Teacher Notes
Lesson 21
Solve Problems About Time

14 Mr. Chen started doing yard work at 10:00. He watered flowers for 6 minutes, weeded his garden for 12 minutes, and trimmed bushes for 27 minutes. What time was Mr. Chen done with his yard work?

Show your work.

Possible student work:
6 + 12 + 27 = 45

45 minutes after 10 is 10:45.

Solution 10:45

15 Carter finished cleaning his room at 11:35. It took him 10 minutes to put all his toys away and 4 minutes to make his bed. What time did Carter start cleaning his room? Circle the letter of the correct answer.

A 11:49
B 11:25
C 11:21
D 10:21

Ann chose A as the correct answer. How did she get that answer?

Possible answer: Ann counted 14 minutes forward instead of backward.

Did Carter start cleaning his room before or after 11:35?

I think adding all of the times together first would make this problem easier to solve.

Pair/Share
Did you need to draw a clock or number line to help you? Why or why not?

Possible student work:

6
1
12
1
27
5
45

45 minutes after 10 is 10:45.

Possible answer: Ann counted 14 minutes forward instead of backward.

Pair/Share
Does Ann’s answer make sense?

Possible student work:

Solution

10:45; Students may use an equation to find the total elapsed time and then reason that 45 minutes after 10:00 is 10:45.

DOK 2

15 Solution

C; From 35 minutes, subtract the number of minutes it took Carter to put away his toys and make his bed. Keep the number of hours the same.

Explain to students why the other two answer choices are not correct:

B is not correct because it includes only 10 minutes, not 14 minutes, of elapsed time.

D is not correct because it includes an extra hour of elapsed time.

DOK 3

Assign Practice and Problem Solving pages 239–240 after students have completed this section.
Students use clocks, number lines, and equations to solve problems involving the addition and subtraction of time intervals that might appear on a mathematics test.

**Solutions**

1. **Solution**

   B; Use a clock or number line, to count the elapsed time, or subtract 8 from 37.

   DOK 1

2. **Solution**

   C; Add 5, 25, and 5 to find the total elapsed time. Then count backward from 10:10 to find the start time.

   DOK 2

3. **Solution**

   a. Yes;
   b. No;
   c. Yes

   DOK 2

**Quick Check and Remediation**

- Ask students to find the start time if the end time is 8:20 and the elapsed time is 36 minutes. [7:44]
- For students who are still struggling, use the chart to guide remediation.
- After providing remediation, check students’ understanding. Ask students to find the end time if the start time is 1:55 and the elapsed time is 42 minutes. [2:37]

If the error is... | Students may... | To remediate...
---|---|---
8:56 | not understand they need to count backward to find the start time. | Give students a situation including the start time, elapsed time, and end time. Have them model the end time on a clock. Ask: *Is the start time earlier or later?* [earlier] Then have them physically move the minute hand backward to get to the start time.

8:44 | not realize they need to make the number of hours one less. | Remind students that because the number of hours increases when the minute hand goes past the 12 going forward, it also must decrease when the minute hand goes backward past the 12. Have students use a clock to model the problem. Have them identify whether the number of hours increases by 1, stays the same, or decreases by 1. [decreases by 1]

any other time | have counted the minutes incorrectly. | Review with students how to count minutes on both a clock and a number line.
Lesson 21
Solve Problems About Time

4 Joe spent 40 minutes reading a magazine. Which pairs of clocks show possible times that he started and finished reading the magazine? Circle the letter for all that apply.

A Start: Finish:

B Start: Finish:

C Start: Finish:

D Start: Finish:

5 Mariah played two games of checkers with her brother. The first game took 12 minutes and the second game took 18 minutes. They put the game away at 7:55. What time did they start playing checkers?

Show your work.

Possible student work using an analog clock:

Answer They started playing checkers at 7:25.

6 Jamal started writing thank-you notes at 5:25. It took him 20 minutes to write them. He also spent some time writing addresses on the envelopes. He finished at 6:00. How long did it take Jamal to write the addresses?

Show your work. Possible student work using a number line:

Answer It took Jamal 15 minutes to write the addresses.

Hands-On Activity
Use manipulatives to represent elapsed time.

Materials: toothpicks, rubber bands
- Give each student 90 toothpicks. Tell students each toothpick represents 1 minute. Have students bundle the toothpicks into one group of 60. (There should 30 left over.)
- Tell students their toothpicks can represent the time 1:30 (since they show 1 hour and 30 minutes). Give students 40 more toothpicks to represent an activity that took 40 minutes to complete. Ask students to use the toothpicks to find the end time. [Students should make an additional bundle of 60 toothpicks and have 10 left over. The end time represented is 2:10.]

Challenge Activity
Use equations and regrouping to solve time problems.

Tell students that they can write addition and subtraction problems to solve start and end time problems, but they need to regroup in a way they haven’t done before. Start with the following problem: Joe started mowing his lawn at 5:30. It took him 50 minutes to complete the mowing. What time did he finish? Show them how to set up the addition problem and work through the steps together:

\[
\begin{align*}
5 \text{ hours } 30 \text{ minutes} & \text{ + } 0 \text{ hours } 50 \text{ minutes} \\
& = 6 \text{ hours } 20 \text{ minutes}
\end{align*}
\]

Work through the steps together.
Discuss how 30 minutes + 50 minutes is regrouped. [80 min = 60 + 20 min; 60 min + 20 min = 1 hour + 20 min]
Have students identify the sum [6 hours 20 minutes] and the end time. [6:20]
Repeat with other problems, including some that use subtraction to find a start time.
Lesson 21
Solve Problems About Time

Overview

Assign the Lesson 21 Quiz and have students work independently to complete it.

Use the results of the quiz to assess students’ understanding of the content of the lesson and to identify areas for reteaching. See the Lesson Pacing Guide at the beginning of the lesson for suggested instructional resources.

Tested Skills

Assesses MGSE3.MD.1

Problems on this assessment form require students to be able to measure time intervals in minutes using clocks, solve word problems involving addition and subtraction of time intervals, find elapsed time, and find the start time or end time when the other of them is given and the elapsed time is given or calculated. Students will also need to be familiar with telling time to the nearest minute, adding and subtracting two-digit numbers, and counting by five.

Lesson 21 Quiz continued

The table shows Naomi’s chores and how long it takes her to do each chore.

It is 6:04 now and Naomi needs to leave for her soccer game at 6:30. She needs 6 minutes to put on her uniform before she leaves. Which chores can Naomi do before she leaves?

Circle all the correct answers.

A Naomi has enough time to sweep the floor and wash the dishes.
B Naomi has enough time to take out the trash and wash the dishes.
C Naomi has enough time to sweep the floor and take out the trash.
D Naomi has enough time to do all of her chores.

<table>
<thead>
<tr>
<th>Chore</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash the dishes</td>
<td>13 minutes</td>
</tr>
<tr>
<td>Sweep the floor</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Take out the trash</td>
<td>9 minutes</td>
</tr>
</tbody>
</table>

Alex starts his math and science homework at 6:18 pm. He does his math homework first, and it takes 12 minutes. His science homework takes 13 minutes.

Choose True or False for each sentence.

a. Alex finishes his homework at 6:43 pm.
   - True  | False
b. Alex finishes his homework in 20 minutes.
   - True  | False
c. Alex finishes his math homework at 6:30 pm.
   - True  | False
d. Alex finishes his homework at 27 minutes before 7:00.
   - True  | False

Music class starts at 11:32 am and lasts for 42 minutes. What time does music class end?

Use the times in the box to fill in the blank.

<table>
<thead>
<tr>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:14 AM</td>
</tr>
<tr>
<td>12:14 PM</td>
</tr>
<tr>
<td>12:02 PM</td>
</tr>
<tr>
<td>11:50 AM</td>
</tr>
</tbody>
</table>

Answer: Music class ends at ________.
Common Misconceptions and Errors

Errors may result if students:
• count in the wrong direction, from the wrong start time, or from the wrong hand.
• add, subtract, or count minutes incorrectly.
• increase/decrease the hour when not appropriate or forget to increase/decrease the hour when appropriate.
• count only by 5s when they should also count by 1s.

Ready® Mathematics
Lesson 21 Quiz Answer Key

1. A  
   DOK 2
2. 36  
   DOK 1
3. A, C  
   DOK 3
4. a. True  
b. False  
c. True  
d. False  
   DOK 2
5. 12:14 PM  
   DOK 2
<table>
<thead>
<tr>
<th>Station #</th>
<th>Exercise</th>
<th>Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Push-Ups</td>
<td>How many push-ups can you do?</td>
</tr>
<tr>
<td>2</td>
<td>Stretch</td>
<td>How many muscles can you safely stretch? Hold stretches for 10 seconds each.</td>
</tr>
<tr>
<td>3</td>
<td>Sit-Ups</td>
<td>How many sit-ups can you do?</td>
</tr>
<tr>
<td>4</td>
<td>Pass and Catch</td>
<td>How many times can you pass and catch a ball with a partner?</td>
</tr>
<tr>
<td>5</td>
<td>Water</td>
<td>Remember to stay hydrated. Get 1 quick and quiet drink.</td>
</tr>
<tr>
<td>6</td>
<td>Jump and Think</td>
<td>How many fruits can you name while jumping an invisible jump rope?</td>
</tr>
<tr>
<td>7</td>
<td>Bicep Curls</td>
<td>How many bicep curls can you do with a household item (milk jug, tv remotes, bottle of water, etc.)?</td>
</tr>
<tr>
<td>8</td>
<td>Plank</td>
<td>How long can you hold a plank?</td>
</tr>
<tr>
<td>9</td>
<td>Balance and Think</td>
<td>Balance on one foot. How many vegetables can you name?</td>
</tr>
<tr>
<td>10</td>
<td>Heart Rate</td>
<td>Take your pulse for the full minute. How many beats did you count?</td>
</tr>
</tbody>
</table>
Lesson 8
Determining the Central Message

Learning Target
Use the key details and events of a story to figure out the central message, or lesson, that the author wants to share with readers.

Read  Many stories have a central message, or lesson, the author wants to share. The story teaches the lesson through the characters, the events that happen, and what the characters learn.

As you read, looking for the key details will help you to find the central message and understand what you read.

Look at the cartoon. Think about a lesson the boy learns by the end.

Don’t let go of me!
I can do it!
Think  The events in the cartoon tell about a problem the boy has and what he does. Complete the chart by adding the key details. Use those details to figure out the central message of the cartoon.

<table>
<thead>
<tr>
<th>Key Detail</th>
<th>Key Detail</th>
<th>Key Detail</th>
</tr>
</thead>
</table>

What Is the Central Message?

Talk  Using the key details in the chart, talk about the central message of the cartoon.

Academic Talk  Use these phrases to talk about the text.

• central message  • key details
One fall afternoon, a girl went to a farm to pick apples. She was in a hurry, so she picked carelessly both ripe apples and unripe ones. When she finished, her wagon was filled with a small mountain of apples.

The girl asked the farmer, “Quick, tell me how long you think it will take me to get back home.”

The farmer thought carefully. Then he said, “Be patient. If you go slowly, you will be back soon. If you go fast, you will not get back until night. It’s your choice.”

The girl thought, “How can that be? How can it take so long if I go fast?”

The girl wanted to get back home as soon as possible, so she rushed her horse and wagon onto the road. She made her horse walk very fast.

And suddenly . . . bump! Off fell some apples.

Every time she hit a bump, more apples rolled off her wagon. Then she had to stop and put them back on the wagon. Because of all the delays, it was night before she got home.
How can key details help you figure out what lesson the girl in the story learns?

**Think**

1. Complete the chart by writing some key details about what the characters say and do. Then write the central message, or lesson.

   **Key Details (the Girl)**

   **Key Details (the Farmer)**

**What Is the Central Message?**

**Talk**

2. Think about the message of the story. Talk about what the girl learned.

**Write**

3. **Short Response** What is another lesson the girl might learn from what happened? Use the space provided on page 126 to write your answer.

**HINT** What might the girl think about the farmer’s advice by the end of the story?
1. Once a farmer rented some land. “How much does it cost to use this land?” the farmer asked the landowner.
2. The owner wanted to get the better part of the deal. So he said, “I’ll take the top half of the crop, and you can take the bottom half.”
3. But the farmer was clever. He planted potatoes because they grow in the ground. At harvest time, he gave the owner the potato tops, which are not good for anything.
4. The owner knew he had been outsmarted. He said, “Next year, I want the bottom half of your crops.”
5. So the next year the farmer planted oats, which grow at the top of long grasses. The bottom half is useless grassy straw. That’s what the farmer gave to the owner.
6. This time the owner said, “Next year, I’ll take the top and the bottom. You can have the middle.”
7. So this time, the farmer planted corn. At the top of each corn stalk are tassels. At the bottom are woody stalks. In the middle is where the tasty sweet corn grows.
8. For a third time, the owner had been outsmarted. Now it was the farmer’s turn to suggest a deal. “From now on,” he said, “why don’t you take half of whatever I grow? Whatever I get, you will get the same.”
9. This was a fair deal at last. From that day on, the owner and the farmer shared the crops equally.
Think

1. This question has two parts. Answer Part A. Then answer Part B.

   Part A
   What is the central message of “Sharing the Crops”? 
   A. It is wrong to try to cheat others. 
   B. Never make a deal with a clever farmer. 
   C. The best part of a crop is usually at the top. 
   D. If a plan doesn’t succeed, keep trying.

   Part B
   Which sentence from the story best supports the answer you chose for Part A above?
   A. “Once a farmer rented some land.”
   B. “The owner wanted to get the better part of the deal.”
   C. “This was a fair deal at last.”
   D. “So this time, the farmer planted corn.”

Talk

2. Using key details from the text, talk to your partner about how the farmer outsmarts the landowner.

Write

3. Short Response Explain which character in “Sharing the Crops” learns a lesson. Use one detail from the folktale to support your response. Use the space provided on page 127 to write your answer.

HINT Reread to look for the character who learns a lesson.
Write  Use the space below to write your answer to the question on page 123.

The Girl and the Apples

3 Short Response  What is another lesson the girl might learn from what happened?

HINT What might the girl think about the farmer’s advice by the end of the story?

Don’t forget to check your writing.
Write  Use the space below to write your answer to the question on page 125.

Sharing the Crops

3 Short Response  Explain which character in “Sharing the Crops” learns a lesson. Use one detail from the folktale to support your response.

Check Your Writing

☐ Did you read the prompt carefully?
☐ Did you put the prompt in your own words?
☐ Did you use the best evidence from the text to support your ideas?
☐ Are your ideas clearly organized?
☐ Did you write in clear and complete sentences?
☐ Did you check your spelling and punctuation?
1  Long ago, there was a gentle donkey named Zel. Everyone in town loved Zel because she was so pleasant and kind. But Zel’s owner, Madame Charity, was angry and mean. She was so mean that she threw rocks at birds for singing too loud. She yelled at little boys when they laughed. But she was the meanest of all to poor Zel.

2  Every Saturday, Madame Charity sold sugar and rice at a market. Whoever arrived earliest sold the most. But Madame Charity always woke up late. Then she got angry and yelled at Zel, who had done nothing wrong.

3  In a huff, Madame Charity would then load heavy bags of rice and sugar onto Zel’s back. Last, she climbed on top of it. “Hurry, Zel!” she yelled. “Get me to market as fast as you can!” Although Zel always trotted as fast as she could, it was never fast enough for Madame Charity.
One day, Zel's friend Touloulou the crab visited. "Did you have a good day at the market?" asked Touloulou.

"Madame Charity was mad at me all day. I work as hard as I can, but she is always mean to me."

"Madame Charity is always late. She won't blame herself, so she blames you," said Touloulou.

"Yes," said Zel. "And because everyone is afraid of her angry tongue, she never sells much at the market."

"I will help you," said Touloulou.

The next Saturday, Madame Charity woke up at 9 a.m. "Oh, no! I'm late again!" she yelled. As she tossed her heavy bags onto Zel's back, Touloulou the crab grabbed onto the hem of her long skirt. Madame Charity climbed on Zel's back. Touloulou held tightly to her skirt.
Zel started trotting. Madame Charity remembered how late she was. She opened her mouth to speak angrily, but Touloulou pinched her ankle.

“Ouch!” Madame Charity rubbed her ankle. She forgot how late she was. But soon she remembered. “Faster, Zel! Faster!” she yelled.

Again Touloulou pinched Madame Charity’s ankle.

“Ouch!” shouted Madame Charity.

When they got to the market, Madame Charity saw that someone had taken the stall she liked to use. In a fit of rage, Madame Charity opened her mouth to yell. For the third time, Touloulou pinched her ankle. Madame Charity screamed.

“What’s wrong?” people asked.

“Hurrying to get to market, I must have hurt my ankle. It’s very painful. Ouch! Ouch! Ouch!”

The fish seller said, “Madame Charity, you should get up earlier. Then you will not have to rush. Next week, I will wake you at 6 a.m."

“Thank you,” said Madame Charity. She was surprised at the man’s kindness.

“Let me fix your ankle,” said the fruit seller. In the past, the fruit seller had not talked to Madame Charity. Today he felt sorry for her.

When Madame Charity saw how kind everyone was, she smiled. For the first time, she sold all of her rice and sugar. At the end of the day, she saddled Zel gently and rode quietly home.

From that day on, Madame Charity tried not to raise her voice in anger. Sometimes she got angry, but she kept it to herself. And Zel the gentle donkey was happy at last.
**Think**  Use what you learned from reading the selection to respond to these questions.

1. Which detail in the first part of the story explains why Madame Charity is cruel to Zel?
   - **A** Zel does not walk to the market as fast as she is able to.
   - **B** Madame Charity is always angry and mean.
   - **C** Madame Charity does not have enough sugar and rice to sell.
   - **D** Everyone in town loves Zel because she is pleasant and kind.

2. Describe how Touloulou helps Zel.

3. This question has two parts. First, answer Part A. Then answer Part B.

   **Part A**
   What is the central message of this story?
   - **A** Honesty is the best policy.
   - **B** Kindness gets better results than anger.
   - **C** Things are not always as they appear.
   - **D** Beware of strangers.

   **Part B**
   Which sentence from the story is **most** important to the central message of the story?
   - **A** “Madame Charity, you should get up earlier.”
   - **B** “Then she got angry and yelled at Zel . . . ”
   - **C** “From that day on, Madame Charity tried not to raise her voice in anger.”
   - **D** “Today he felt sorry for her.”
4 What is the meaning of the word *market* as it is used in this sentence from the story?

Every Saturday, Madame Charity sold sugar and rice at a market.

A a store where food and spices are bought
B a place where people buy and sell things
C a street fair where people gather
D a bank where money is exchanged

5 **Write** A central message of “Zel, the Gentle Donkey” is that being kind to others can cause good things to happen. Explain how the actions of the characters in the story show this central message.

5 **Plan Your Response** Make a list of things from the story that tell about the kindness of some of the characters.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

6 **Write an Extended Response** Review the central message of “Zel, the Gentle Donkey.” Explain how the characters in the story help deliver this message. Use details from the story to support your answer.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Learning Target

Explain why understanding the central message of a story will help you understand the text you read.
Study the example problem showing how to tell time to the minute. Then solve problems 1–7.

**Example**

Oscar took his pet hamster out of its cage to play. The clock shows what time it was. What time did Oscar take the hamster out of the cage?

The hour hand shows that it is between 7 and 8 o’clock. It takes 5 minutes for the minute hand to move from one number to the next. It takes 1 minute for the minute hand to move from one mark to the next.

Count by fives from the 12 to the 3. Then count 2 more minutes.

The clock shows 17 minutes after 7, or 7:17. Oscar took the hamster out of the cage at 7:17.

**Draw lines to match clocks that show the same time.**

1. Match the analog and digital clocks:
   - The analog clock shows 10:27 and the digital clock shows 10:27.
   - The analog clock shows 5:54 and the digital clock shows 5:54.
   - The analog clock shows 3:41 and the digital clock shows 3:41.
Solve.

2 Look at the arrows on the clock. Count by fives and by ones to find the minutes before the hour. Fill in the blanks.
5, _____, 11, _____, _____, _____
It is _____ minutes before ________.

Write the time in two ways.

3 ________
_____ minutes before ________

4 ________
_____ minutes before ________

Draw the hands on the clock to show the time.

5 It is 22 minutes before 4:00.

6 It is 9 minutes after 9:00.

7 Write the times from problems 5 and 6 on the clocks below.
Lesson 21  Solve Problems About Time

Find the End Time in Word Problems

Study the example problem showing how to find the end time when you know the start time and the elapsed time. Then solve problems 1–6.

Example

Anna started walking her dog, Pickles, at 2:40. She walked for 25 minutes. Then she played ball with Pickles for 15 minutes. What time did Anna finish?

Start at 2:40. Count 25 minutes for the walk. Then count 15 minutes for playing ball. The minute hand went past 12, so the hour moved ahead to the 3. The minute hand ended on the 4.

The second clock shows the end time, which is 3:20.

1 Alma got to the playground at 2:45. She spent 20 minutes on the swings and 10 minutes on the jungle gym. She played on the slide for 12 minutes. Then she went home. What time did Alma go home?

Fill in the blanks.

Alma went home at ________.

2 Juanita got in line for the Safari Ride at 11:55. She waited in line for 8 minutes. The ride lasted for 7 minutes. What time did she get off the ride?

Solution: _________

Vocabulary

elapsed time  the time between a start time and an end time.
Solve.

3 Jay went outside at 10:50 and spent 35 minutes looking for worms. Then he took 10 minutes to collect his gear. After that Jay went fishing. What time did Jay leave to go fishing? Draw hands on the clock to show the time. Write the time.

Jay left to go fishing at ________.

4 Kareem started climbing on the rock wall at 5:20. He climbed for 16 minutes. What time did Kareem finish climbing on the rock wall?

Solution: ____________________________

5 The Mendoza family left home at 10:30. They drove 25 minutes and stopped at the store. The family spent 20 minutes in the store. Then they drove another 13 minutes to get to the beach. What time did they get to the beach?

Show your work.

Solution: ____________________________

____________________________________

6 Sharna leaves school at 3:10. It takes 12 minutes for her to walk home from school. It takes 7 minutes for her to gather her soccer equipment and 10 more minutes to get to the soccer field. Soccer practice starts at 3:45. Sharna thinks she will be late. Do you agree? Explain.

____________________________________

____________________________________

____________________________________
Find the Start Time in Word Problems

Study the example problem showing how to find the start time when you know the end time and the elapsed time. Then solve problems 1–5.

Example

Ming is riding her bike to Carmen’s house. She wants to be there by 4:30. First she has to do homework for 30 minutes. The bike ride takes 15 minutes. What time should Ming start her homework?

Start at 4:30. Count back 15 minutes for the bike ride. Then count back 30 minutes for homework. The minute hand went past 12, so the hour moved back to the 3. The minute hand ended on the 9.

The second clock shows the start time, which is 3:45. Ming should start her homework by 3:45.

1 Johanna and her mom want to get to the birthday party at 2:00. It is a 25-minute walk. On the way, they plan to stop for 15 minutes to get a card. What time should they leave? Show how to count backward on the number line.

Solution: ________________________________

________

2 If they drive, it takes 8 minutes to get to the party. Johanna and her mother still want to stop and get a card. What time should they leave if they drive to the party? Explain.

________
Solve.

3 A movie starts at 5:15. Rudy wants to get to the theater 25 minutes before the movie starts. It takes 10 minutes to drive to the theater. What time should Rudy leave home?

*Show your work.*

Solution: 

4 Carlos played on the playground for 12 minutes. Then he swam at the pool for 25 minutes. He finished at 12:00. What time did he start playing?

*Show your work.*

Solution: 

5 Allie was done with gymnastics practice at 7:30. At practice, she tumbled for 20 minutes. Then she worked on the balance beam for 10 minutes. Allie also practiced on the trampoline for 15 minutes. What time did she start practice?

*Show your work.*

Solution: 
Solve the problems.

1. The Soto family sat down at a table at a restaurant. Then they waited 10 minutes to order their food. They waited 20 minutes until the food arrived. They took 25 minutes to eat dinner and were done at 6:30. What time did they sit down at the table? Circle the letter of the correct answer.

   A  5:25  C  5:45
   B  5:35  D  7:25

   Dana chose D as the correct answer. How did she get that answer?

   ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________

2. Rashid made a stuffed bear at the toy store. He started at 4:40. He spent 25 minutes at the stuffing table and 21 minutes at the decorating table. Then he was done. What time did he finish?

   Show your work.

   Solution: ______________________________________________________
Solve.

3 Nathan's family wants to be at Grandma's house by 10:45. They need to take a 50-minute bus ride. Then they have to walk for 12 minutes. They can take a bus that leaves at 9:45 or one that leaves at 9:30. Which bus should the family take? Explain.

Do you count forward or backward from each start time?

4 How long is it from 7:06 to 7:32? Circle the letter of the correct answer.

A 16 minutes  C 26 minutes
B 24 minutes  D 38 minutes

How might you use subtraction to find the answer?

5 Nathan's family wants to be at Grandma's house by 10:45. They need to take a 50-minute bus ride. Then they have to walk for 12 minutes. They can take a bus that leaves at 9:45 or one that leaves at 9:30. Which bus should the family take? Explain.

It's okay to get there a little early.
The String Family

When you look at a string instrument, the first thing you'll probably notice is that it's made of wood, so why is it called a string instrument? The bodies of the string instruments, which are hollow inside to allow sound to vibrate within them, are made of different kinds of wood, but the part of the instrument that makes the sound is the strings, which are made of nylon, steel or sometimes gut. The strings are played most often by drawing a bow across them. The handle of the bow is made of wood and the strings of the bow are actually horsehair from horses' tails! Sometimes the musicians will use their fingers to pluck the strings, and occasionally they will turn the bow upside down and play the strings with the wooden handle.

The strings are the largest family of instruments in the orchestra and they come in four sizes: the violin, which is the smallest, viola, cello, and the biggest, the double bass, sometimes called the contrabass. (Bass is pronounced "base," as in "baseball.") The smaller instruments, the violin and viola, make higher-pitched sounds, while the larger cello and double bass produce low rich sounds. They are all similarly shaped, with curvy wooden bodies and wooden necks. The strings stretch over the body and neck and attach to small decorative heads, where they are tuned with small tuning pegs.

The violin is the smallest instrument of the string family, and makes the highest sounds. There are more violins in the orchestra than any other instrument they are divided into two groups: first and second. First violins often play the melody, while second violins alternate between melody and harmony. A typical-sized violin is around 24 inches (two feet) long, with a slightly longer bow. You play the violin by resting it between your chin and left shoulder. Your left hand holds the neck of the violin and presses down on the strings to change the pitch, while your right hand moves the bow or plucks the strings.

The viola is slightly larger than the violin, just over two feet long, and has thicker strings, which produce a richer, warmer sound. Violas almost always play the harmony. You play the viola the same way as you do the violin, by resting it between your chin and shoulder. Your left hand holds the neck of the viola and presses down on the strings to change the pitch, while your right hand moves the bow or plucks the strings.
The **cello** looks like the violin and viola but is much larger (around 4 feet long), and has thicker strings than either the violin or viola. Of all the string instruments, the cello sounds most like a human voice, and it can make a wide variety of tones, from warm low pitches to bright higher notes. There are usually 8 to 12 cellos in an orchestra and they play both harmony and melody. Since the cello is too large to put under your chin, you play it sitting down with the body of the cello between your knees, and the neck on your left shoulder. The body of the cello rests on the ground and is supported by a metal peg. You play the cello in a similar manner to the violin and viola, using your left hand to press down on the strings, and your right hand to move the bow or pluck the strings.

At over 6 feet long, the **double bass** is the biggest member of the string family, with the longest strings, which allow it to play very low notes. The 6 to 8 double basses of the orchestra are almost always playing the harmony. They are so big that you have to stand up or sit on a very tall stool to play them, and it helps if you have long arms and big hands. Like the cello, the body of the double bass stands on the ground, supported by a metal peg, and the neck rests on your left shoulder. You produce sound just like on a cello, using the left hand to change pitch and the right to move the bow or pluck the string.
Name: ____________________________________
Teacher: ________________________________

The String Family

1. Name these four primary string instruments.

________________       _______________     _________________      ___________________

2. What do all these instruments have? (Circle the correct answer.)
   
   Mouthpiece       Strings       Keys

3. Name at least four parts of a string instrument.
   ___________________________________________________________________________________
   ___________________________________________________________________________________

4. Which instrument plays the highest pitches?   ____________________________________

5. Which instrument plays the lowest pitches? ______________________________________
Match the Parts of the Violin with their Names

Listed below are the names of the parts of the violin.

On each blank, write the matching letter for the part.

<table>
<thead>
<tr>
<th>Instrument</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. _____ Scroll</td>
<td></td>
</tr>
<tr>
<td>2. _____ Neck</td>
<td></td>
</tr>
<tr>
<td>3. _____ Tailpiece (String Holder)</td>
<td></td>
</tr>
<tr>
<td>4. _____ Bridge</td>
<td></td>
</tr>
<tr>
<td>5. _____ Chin Rest</td>
<td></td>
</tr>
<tr>
<td>6. _____ F Holes (Sound Holes)</td>
<td></td>
</tr>
<tr>
<td>7. _____ Pegs</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bow</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. _____ Frog</td>
<td></td>
</tr>
<tr>
<td>2. _____ Hair</td>
<td></td>
</tr>
<tr>
<td>3. _____ Tip (Point)</td>
<td></td>
</tr>
</tbody>
</table>

What Am I?

I am the place where you rest your chin......What Am I? ____________________________

I rub across the strings and cause friction which produces sound....What Am I? ______________________

I am where you hold the bow....What Am I? ______________________________

There are four of me, I vibrate to produce sound...What Am I? ______________________

You turn me to tune orchestral string instruments.....What Am I? ________________
Time Match

What You Need
• Recording Sheet

What You Do
1. Take turns. Choose a letter and read the time on the clock next to that letter in the table.

2. Tell the time in another way using the word before or after.

3. Your partner finds the matching letter on the Recording Sheet and then draws the hands on the clock to match the time read.

4. Check the clock.

5. Repeat until all the letters are used.

| A | 1:07 |
| B | 9:23 |
| C | 4:39 |
| D | 7:41 |
| E | 5:58 |
| F | 10:16 |

Check Understanding
Draw a clock face with the time showing 7:23. Explain how you know where to draw each hand.

Go Further!
Choose three clocks from the table above. For each clock write how many more minutes until the next half hour.
For the minutes, I start at 12 and count to each number by fives. Then I count the small tick marks past the number by ones.
Solve Time Word Problems

What You Need

- Recording Sheet

What You Do


2. Use the number line to help you solve the problem.

3. Your partner checks your work.

4. Continue until all the problems have been solved.

Check Understanding

Joe arrives at the movie theater at 4:15. It took 22 minutes to drive there. What time did he leave? Explain how to use a number line to solve the problem.

When I read the problem, I need to think about which direction to move on the number line.

Go Further!

Tell your partner a word problem about time that uses subtraction. Have your partner solve the problem. Check your partner’s work.
Juan starts piano practice at 5:30. He practices one song for 15 minutes and another for 10 minutes. What time does he finish? ________________

Mike left band practice at 6:15. At band practice, he warmed up for 6 minutes and played his trumpet for 20 minutes. What time does he get to band practice?

____________________

Tora begins cleaning her room at 7:45. It takes her 10 minutes to pick up her toys, 4 minutes to make her bed, and 6 minutes to straighten her bookshelf. What time does she finish? ________________

Emily is talking with her family on the phone. She talks 8 minutes to her uncle, 6 minutes to her grandma, and 7 minutes to her mom. She finishes at 7:00. What time does the phone call start? ________________
Alphabet Fitness

A - 20 Jumping Jacks
B - 20 Crunches
C - 10 Squats
D - 10 Pushups
E - 20 Mountain Climbers
F - 10 Burpees
G - 10 Arm Circles
H - 15 Squats
I - 5 Push-ups
J - 20 High Knees
K - 10 Push-ups
L - 10 Walking Lunges
M - 5 Burpees
N - 20 Second Plank
O - 20 Jumping Jacks
P - 10 Arm Circles
Q - 15 Crunches
R - 5 Pushups
S - 15 Mountain Climbers
T - 20 High Knees
U - 15 Squats
V - 10 Burpees
W - 30 Jumping Jacks
X - 15 Crunches
Y - 20 Jumping Jacks
Z - 20 Plank Shoulder Taps