Grade 3 Practice Book Answer Keys

🔑 ANSWER KEY

Use after Unit One, Session 10

Page 1, Addition & Subtraction Fact Practice

1 4, 6, 8, 10, 12, 14, 16, 18

2 5, 7, 9, 11, 13, 15, 17, 19

3 2, 3, 4, 5, 6, 7, 8, 9

4 1, 2, 1, 2, 2, 1, 2, 1

5 (challenge) Students' responses will vary. Example: *The answers to all the doubles facts are even. The answers to all the neighbors facts are odd.*

Page 2, Sam's Pet Graph

1 Dogs

2 4 students

3 3 more students chose dogs than cats.

4 5 more students chose cats than birds.

5 **a** Students' responses will vary. Example: *How many students did Sam survey?*

   b Students' responses will vary. Example: *Sam surveyed 23 students.*

Page 3, Numbers in the Hundreds

1 **a** 147

   b 302

   c 178

2 **a** 226, 262, 226 < 262

   b 307, 317, 307 < 317

   c 894, 849, 894 > 849

Page 4, The Cafeteria Survey

1 Students' work may vary slightly. Example:

Title: **Third Graders' Favorite Drinks**
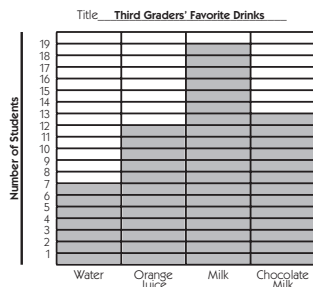
2 51 students; students' work will vary.

3 Milk was the most popular drink.

4 **a** Students' responses will vary. Example: *How many more students voted for milk than water?*

   b Students' responses will vary. Example: *12 more students voted for milk.*

Page 5, Fast Tens & Fast Nines Practice

1 12, 13, 14, 15, 16, 17, 18, 19

2 11, 12, 13, 14, 15, 16, 17, 18

3 8, 2, 5, 7, 3, 6, 4, 9

4 10, 10, 10, 10, 10, 10, 10, 10

5 (challenge) Students' responses will vary. Example: *The answers to both problems go in counting order.*

Page 6, Jorge's Saving Plans

1 4 weeks

2 10 weeks

3 12 weeks

4 (challenge) 7 more weeks after the 7th week; 14 weeks in all.

Page 7, Missing Numbers Fill-In

1 5, 7, 4, 2
   10, 1, 3, 6

2 2, 8, 3, 18
   5, 6, 4, 14

3 7, 10, 9, 7, 7, 11
   8, 9, 9, 3, 14, 5

4 (challenge) Students' responses will vary. Example: *They are all doubles addition facts.*

Page 8, Name the Fraction

1 **a** $\frac{1}{3}$

   b $\frac{1}{4}$

   c $\frac{1}{2}$

   d $\frac{1}{4}$

   e $\frac{1}{3}$

2 (challenge) $\frac{1}{4}$ of the array is green.

Page 9, Related Addition & Subtraction Facts

1 10, 10, 10, 10, 11, 13, 14
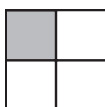
2 11, 12, 12, 13, 14, 13, 12

Use after Unit One, Session 10 (cont.)

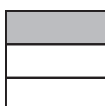### Page 9, Related Addition & Subtraction Facts (cont.)

3 5, 7, 5, 5, 8, 6, 6

  6, 8, 4, 7, 8, 5, 9

4 (challenge) 300, 390, 610, 900, 810, 700, 700

5 (challenge) 127, 340, 116, 96, 203, 225, 111
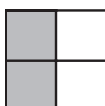
Page 10, Fraction Fill-Ins

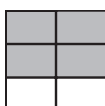**1 a** One of four regions shaded. Example:

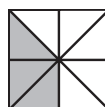**b** One of three regions shaded. Example:
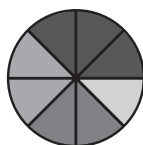
c Two of four regions shaded. Example:

d (challenge) Four of six regions shaded.
Example:

e (challenge) Three of eight regions shaded.
Example:

2 (challenge) $^2/_8$ of the circle is blue. ($^1/_4$ is also
acceptable.) Example:

3 (challenge) $^2/_{12}$ of the rectangle is brown. ($^1/_6$ is also
acceptable.) Example:

Use after Unit One, Session 20

Page 11, Dollar Signs & Decimal Points

1 a $0.05

b $0.10

c $0.25

2 a $0.03

b $0.30

c $0.50

d $0.25

e $0.45

3 a (challenge) 1 quarter, 1 dime, 2 nickels, 1 penny

b (challenge) 3 dimes, 3 nickels, 3 pennies

Page 12, Telling Time to the Hour, Half Hour & Quarter Hour

1 a 4:00

b 10:05

c 3:30

d 2:45

e 11:15

2 (challenge) Clock e

3 (challenge) Clock d

4 (challenge) Clock c

Page 13, More Dollar Signs & Decimals

Coin Collection	Value of Collection	Grid
example	*$0.55*	
1	$0.51	
2	$0.42	
3	$0.45	

🔑 **ANSWER KEY**

Use after Unit One, Session 20 (cont.)

Page 14, Leaves & Flower Petals

1 15 petals, 5 + 5 + 5 = 15 or 3 × 5 = 15
2 14 leaves, 2 + 2 + 2 + 2 + 2 + 2 + 2 = 14 or 7 × 2 = 14
3 20 petals, 5 + 5 + 5 + 5 = 20 or 4 × 5 = 20

Page 15, Bamboo Shoot Growth Graph

1 11 feet
2 On the 8th day
3 No
4 a No
   b Students' explanations will vary. Example: *Because the line on the graph goes up a different amount on some of the days. The plant only grew 1 foot between Days 7 and 9, but it grew 2 feet between Days 2 and 4. It grew faster some times, and more slowly other times.*
5 (challenge) It was 12 inches or 1 foot more than 2 yards tall. Students' work will vary.

Page 16, Eyes, Ears & Whiskers

1 20 eyes, 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 20 or 10 × 2 = 20
2 12 ears, 2 + 2 + 2 + 2 + 2 + 2 = 12 or 6 × 2 = 12
3 18 whiskers, 6 + 6 + 6 = 18 or 3 × 6 = 18

Page 17, Telling Time on Analog & Digital Clocks

1 a 1:55
   b 9:15
   c 7:30
2

3 (challenge) 3:41; Students' work will vary.

Page 18, Eric's Three-Coin Problem

1 Students' responses will vary. Example: *What 3 coins add up to 40¢?*

2 <u>Eric has 3 coins in his pocket. They are worth $0.40.</u> What coins does he have in his pocket?
3 Students' work will vary. A quarter, a dime, and a nickel.

Page 19, Understanding Place Value

1 a hundreds, 300
   b ones, 4
   c tens, 70
   d hundreds, 500
2 a 96 > 69
   b 326 < 362
   c 127 < 217
   d 960 > 906
   e 312 > 231
   f 304 < 430
   g 719 < 790
3 Students' responses will vary.

Page 20, Alexis Walks Home from School

1 Students' responses will vary. Example: *What time did Alexis get home from school?*
2 <u>Alexis started walking from home from school at 3:15. She got home 20 minutes later.</u> What time did she get home?
3 a Students' work will vary.
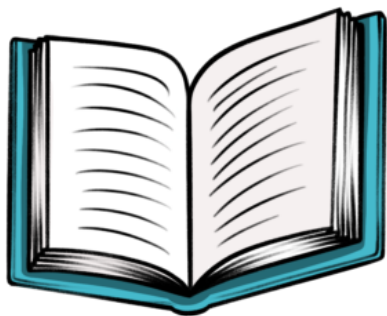   **b** 3:35
4 (challenge) 2:20

Use after Unit Two, Session 15

Page 21, Expanded Notation: 3-Digit Numbers

1

	Hundreds	Tens	Ones	Equation
ex	200	40	5	200 + 40 + 5 = 245
a	100	30	7	100 + 30 + 7 = 137
b	200	60	5	200 + 60 + 5 = 265

2 (challenge) Part b, 128. Student work will vary.

Reading Log

Date:_____

Title of
Book:_____

How Many Pages Did You Read? _____

How Long Did You Read? _____ minutes

Write A Brief Description of What You Read

Name _____

educated	inspired	ached	discovery
satisfied	concentrate	improved	effort

Use a word from the box to answer each question. Then use the word in a sentence.

1. **What can you become if you study often?** _____

   _____

2. **What is another word for *hurt*?** _____

   _____

3. **What word might describe someone who is pleased after a meal?**

   _____

4. **What is another word for *hard work*?** _____

   _____

5. **If someone caused others to take action, what did they do?**

   _____

6. **What word means the same thing as *finding for the first time*?**

   _____

7. **If you want to carefully study for a test, what do you need to do?**

   _____

8. **What is another word for *got better*?** _____

   _____

Name _____

Read the passage. Use the visualize strategy to help form pictures in your mind.

River Rescue

	Enid lived in the jungle with her family and friends. Her home
12	had tall green trees, cool blue streams, and bright and beautiful
23	flowers. It had enough tasty, fresh fruit to last forever.
33	The only thing Enid loved and adored more than her jungle
44	home was reading. She read stories about fish. She read stories
55	about dogs. She read stories about castles in France. Sometimes
65	her friends told her that she read too much.
74	"Enid! You always have your trunk in a book! Your eyes will
86	start to ache if you read too much," her friend Mabel would say.
99	"Come swimming instead."
102	"I'll swim later. I'm reading about a girl with ruby red
113	slippers."
114	Every evening after dinner, Enid would try to read her favorite
125	stories to her friends. They would listen for a little while, but one of
139	them would always say, "Hearing stories isn't fun! Let's go play!"
150	Enid kept reading. She hoped she would inspire her friends to
161	read.
162	One day, after a heavy rain, Enid was trying to read a story
175	about a beaver building a dam. In the middle of chapter 12, she
188	heard a cry for help.
193	Books are a good way to become educated. However, even
203	Enid would put a book down if someone needed her help.
214	"Help!" said the small, meek voice. It came from the river's edge.
226	"I know that voice!" said Enid. "It's my friend Mabel!"

Name _____

Enid ran toward Mabel's voice. When she reached the river's edge she was surprised and shocked by what she saw. The usually calm, flat, clear water was now dark and swirling with splashing white waves. On the other shore on the opposite side of the river was tiny Mabel.

"Enid. What can we do?" asked her friend Harold. "We were about to play in the river like we always do. Mabel was on the other side of the river about to pick some fruit for lunch. Then it happened! The river got deeper and wider all of a sudden. It was magic."

"It wasn't magic," said Enid. "It is a flood. I read about it. Sometimes when it rains too much like it did today, rivers can swell and get bigger without a warning."

"What can we do to help Mabel?" asked Harold. "Did you also read about something to help when rivers get too big?"

Enid thought about her book about the beaver's dam. "Yes! We can build a dam. A dam is like a wall in the river. It slows down the water. When it slows down, Mabel can cross back to us safely."

"How do we make a dam?" asked Harold.

"Like this," said Enid. She rolled round, gray stones toward the river, slowly building a wall in the water. Her friends began helping her, assisting Enid in building the dam. Soon, it was complete and the water slowed. Mabel was able to cross back.

After that day, Enid's friends were satisfied to read books with her and listen to her stories.

Name _____

A. Reread the passage and answer the questions.

1. What do Enid's actions in the first half of the story tell you about her?

_____

_____

_____

2. Why do you think Enid wants her friends to read and listen to stories?

_____

_____

_____

3. A character's actions make the events in a story happen. If Enid did not like reading, how would the story be different?

_____

_____

_____

B. Work with a partner. Read the passage aloud. Pay attention to expression. Stop after one minute. Fill out the chart.

	Words Read	–	Number of Errors	=	Words Correct Score
First Read		–		=	
Second Read		–		=	

Name _____

celebrate	pride	disappointment	remind
precious	tradition	courage	symbols

Finish each sentence using the vocabulary word provided.

1. **(tradition)** Our family gets together for _____

_____ .

2. **(celebrate)** After the girl won the spelling contest, _____

_____ .

3. **(courage)** He won a badge of honor _____

_____ .

4. **(disappointment)** When I didn't get to see my friend, _____

_____ .

5. **(symbols)** Shaking hands and hugging are _____

_____ .

6. **(pride)** My mom was so happy for me _____

_____ .

7. **(remind)** I always forget my lunch _____

_____ .

8. **(precious)** This photo of my grandfather _____

_____ .

Name _____

Read the passage. Use the visualize strategy to help you understand what the characters are describing.

Giving Thanks

	Tom was happy because it was the last day before
10	Thanksgiving weekend. He grabbed his lunch from his kitchen
19	table and went to school. In the lunchroom after morning classes,
30	he sat next to Ana, a new student from India. He had never talked
44	to her before.
47	"Are you excited for the long weekend?" he asked.
56	"Of course," she said. "But why do we have these days off?"
68	"Thanksgiving, of course!" Tom said. "Do you know what it is?"
79	"No, we don't have it where I am from," she said.
90	**Thanksgiving in America**
93	"Oh, Thanksgiving is so much fun," Tom said. "We get to
104	spend precious time with family and friends. First, we have a big
116	feast with turkey, mashed potatoes, and pie. After the feast, I go
128	outside and play football with my brothers."
135	"But why do you have this tradition?" she asked.
144	"It's to remind everyone to give thanks for our food and
155	everything from the past year," he said. "I learned in Ms. Boone's
167	class that the first Thanksgiving was way back in 1621 between
178	the English Colonists and Native Americans."

Name _____

Thanksgiving in India

"Wow, that sounds great," said Ana. "In my country we also give thanks. We do it in a different way."

"Really?" Tom said. "How?"

"I am from a place in India called Tamil Nadu," she said. "In January, we celebrate something called Pongal."

"Pongal? What does that mean?" Tom asked.

"It's an Indian dish," she said. "During the Pongal festival, food is cooked in pots until it boils and spills over. It is a symbol of good times for us."

"Wow," Tom said. "How do you celebrate?"

"First, we give thanks to the rain and sun for help with farming. We even thank the cattle," said Ana. "Then we throw away old things and wear new clothes. We eat food and spend time with family."

Sharing traditions

"I thought that the United States was the only country that had a holiday like Thanksgiving," Tom said. "I guess I was wrong."

"Yes, there are many types of harvest festivals all over the world where people give thanks for food and crops," she said.

"I guess we all have a lot to be thankful for," he said, and they both agreed.

Name _____

A. Reread the passage and answer the questions.

1. **In paragraph six, what is the first thing that Tom does on Thanksgiving?**

   _____

   _____

2. **What is the next thing that Tom does on Thanksgiving?**

   _____

   _____

3. **In the passage, find another example of sequence under the head Thanksgiving in India. What is the first thing that happens in this example?**

   _____

   _____

B. Work with a partner. Read the passage aloud. Pay attention to phrasing. Stop after one minute. Fill out the chart.

	Words Read	–	Number of Errors	=	Words Correct Score
First Read		–		=	
Second Read		–		=	

Name _____

Read the passage. Use the ask and answer questions strategy to be sure you understand what you read.

Joseph Bruchac

Growing Up Near Mountains

4	Joseph Bruchac grew up in the mountains of New York. He
15	lived with his grandmother and grandfather. Young Joseph loved
24	to go with his grandfather everywhere he went. His grandfather
34	showed him how to walk softly through the woods and how to
46	fish in the lakes and rivers.
52	As a child, Joseph spent time working in his grandparents'
62	store. When he made mistakes, his grandfather would never shout
72	or yell at him. Instead, he would talk to Joseph about what had
85	happened. That way Joseph could know how to do better the next
97	time. During the winter, farmers would come to the store. They
108	would sit around the stove and tell Joseph stories.
117	While growing up, Joseph loved to read and write. Joseph's
127	grandmother kept bookshelves in the house full of books. There
137	was always plenty to read. He liked to read storybooks about
148	animals. He also liked reading poetry. He even wrote some
158	poems of his own! One time, he wrote a poem for his teacher.
171	She was very proud.

Name _____

Abenaki Storyteller

Joseph's grandfather was an Abenaki Native American. Joseph became interested in stories told by the Abenaki. When he was in college, Joseph would sometimes visit Native American elders. He would listen to them tell stories. These stories were fun to listen to. But they also taught great lessons about life. Later, Joseph started to have children of his own. He wrote down the stories he heard. Then he read them to his two sons. Soon after that, Joseph began to write children's books. These books told the stories of the Abenaki and other Native American peoples.

Helping Others

In the fourth grade, Joseph's teacher told him, "Whatever you want to do, you should do it." Joseph wanted to write and help others. And that's just what he did. First, he began to write stories. These stories taught children about being kind. They also taught children to care for the Earth. Then, Joseph went to

Abenaki Indian tribes
Adirondack Mountain Range
New York
Saratoga Springs, NY

Map of Joseph Bruchac's homeland

schools all over the United States. He read his stories to children. Now, Joseph helps other writers share their stories.

Today, Joseph spends time in his garden. He has gardens all around his house. The inside of his house is full of many plants. Joseph has been all over the world. But he still lives in the hometown where he grew up. "It is a place I love," says Joseph. He still likes to walk through the woods and mountains. Every day he gets ideas for brand-new stories.

Name _____

A. Reread the passage and answer the questions.

1. What happened during the winter at Joseph's grandparents' store?

_____

_____

_____

2. What happened next after Joseph read stories to his sons?

_____

_____

_____

3. Reread the fifth paragraph. What did Joseph do after he began to write stories?

_____

_____

_____

B. Work with a partner. Read the passage aloud. Pay attention to rate. Stop after one minute. Fill out the chart.

	Words Read	–	Number of Errors	=	Words Correct Score
First Read		–		=	
Second Read		–		=	

Name _____

Keith Little

During World War II, I was a soldier and fought battles in the Marshall Islands and on Iwo Jima in the Pacific Ocean. I was one of the Navajo code talkers. The code talkers used the language of the Navajo people to send messages to the troops. The enemy didn't know this language and couldn't read our code. Our work helped the United States win many battles. After the war, I taught people about Navajo language and culture.
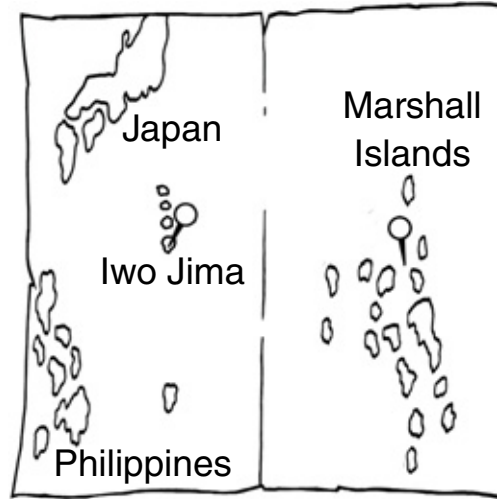
Map of the Philippine Sea

Answer the questions about the text.

1. **How do you know this text is an autobiography?**

_____

_____

2. **What text features does the text include?**

_____

3. **What information does the map give you?**

_____

_____

Name _____

Underline the compound word in each sentence. Then write its definition. Use a dictionary to help you.

1. His grandfather showed him how to walk softly through the woods.

_____

_____

2. He liked to read storybooks about animals.

_____

_____

3. There were plenty of bookshelves in the house full of books.

_____

_____

4. But he still lives in the hometown where he grew up.

_____

_____

Name _____

| design | simple | investigation | encouraged |
| substitutes | quality | examine | solution |

Use a word from the box to answer each question. Then use the word in a sentence.

1. What is another word for *a careful search for something*?

   _____

2. How might you describe a product that is well made? _____

   _____

3. What word might describe an answer to a problem? _____

   _____

4. What would you be doing if you were to create a plan? _____

   _____

5. When you inspect something closely, what do you do? _____

   _____

6. What is another word for *given hope to do something*? _____

   _____

7. What do you call things that take the place of other things?

   _____

8. What is another word for *easy*? _____

   _____

Name _____

Read the passage. Use the ask and answer questions strategy to be sure you understand what you read.

Victor Ochoa's New Idea

	Have you ever made something that no one else had made
11	before? It is not an easy thing to do. People who make something
24	new are called inventors. They look around and see what can
35	be made better and then they do it! Victor Ochoa was one of
48	those people. He made many things. One of them was a flying
60	machine. Victor looked at birds to get his ideas. He wanted to
72	learn everything about how birds flew.
78	**Many Jobs**
80	Victor was born in Mexico in 1850 and grew up in Texas. He
93	lived all over the United States. He loved to work with writers.
105	He wrote for newspapers. He even started two new papers. He
116	worked hard and never gave up, no matter how hard the job was.
129	**A New Plane**
132	Victor's mind was a motor that never turned off. He was
143	always thinking of new ways to make life better. In 1908, he was
156	thinking about the way that birds fly. He thought that he could
168	make a plane that flew like a bird. So he set to work.

Name _____

The center of the plane was made of two bikes set next to each other. It looked a little like a car. It had a small motor that sat between the two bikes. The back was shaped like a bird's tail. The wings were made of canvas and steel pipes. What made this plane different was that the wings could be folded down just like a bird's wings. This was so it could be put in a small shed or barn. This way, everyone could keep a plane at a house or on a farm.

Victor started a company that would make this new plane. He asked the Navy to use his new plane. He wrote the Navy a letter telling them why he thought his plane would be just what they needed. He worked very hard to make his plane work. He worked on it for over twenty years. No one knows if it ever flew.

Other New Ideas

Victor did not let this problem keep him from making other things. Making new things from new ideas was the blood in his veins. He made a new pen that

Victor Ochoa's plane was made of two bikes.

held its own ink. Another thing he came up with was a motor that worked both forward and backward.

Never Give Up

Victor was a spinning top. He was always making new things. He wanted to help other people with his ideas. Not all of his ideas worked. No one who tries something new is successful every time, though. The important part is to keep trying. Victor Ochoa was someone who never stopped trying.

Name _____

A. Reread the passage and answer the questions.

1. What was the cause of Victor's actions in the third paragraph?

_____

_____

_____

2. What effect did this cause have on Victor?

_____

_____

_____

3. What kinds of things did Victor invent to make life better?

_____

_____

B. Work with a partner. Read the passage aloud. Pay attention to expression. Stop after one minute. Fill out the chart.

	Words Read	–	Number of Errors	=	Words Correct Score
First Read		–		=	
Second Read		–		=	

Name _____

George Crum's Potato Chip

George Crum was born in 1822. Later on in life, he became the chef at Moon's Lake House in Saratoga, New York. One day in 1853, a customer ordered french-fried potatoes but sent them back to the kitchen. He said they were too thick and soft. Annoyed, Crum sliced some potatoes very thin and fried them crispy. They were great! George Crum had invented the potato chip.

Thinly slice potato

Brush with butter on tray

Bake at 500° F for 20 minutes
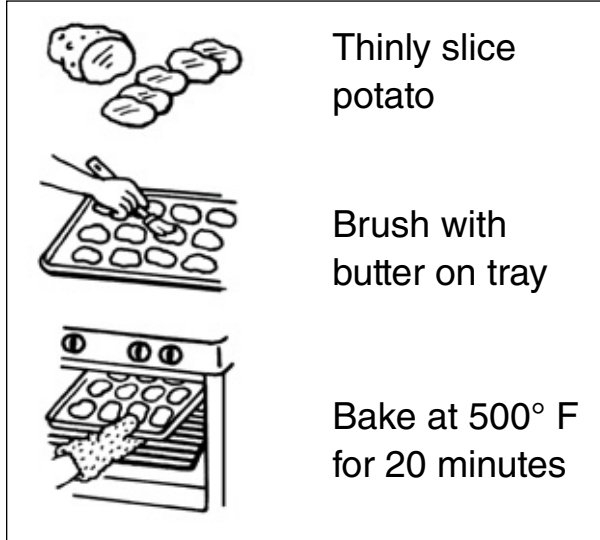
Answer the questions about the text.

1. **How do you know this text is a biography?**

   _____

2. **What text feature does this text include?**

   _____

3. **What does the diagram show you? What title would you give this diagram?**

   _____

4. **How can you tell that the events in the text are in the order that they happened?**

   _____

Name _____

A. Read each sentence from the passage. Then write what two things are being compared in the metaphor on the lines.

1. Victor's mind was a motor that never turned off.

_____

_____

2. Making new things from new ideas was the blood in his veins.

_____

_____

3. Victor was a spinning top.

_____

_____

B. Reread the passage. Use what you have learned to write two metaphors based on the life of Victor Ochoa.

1. _____

_____

2. _____

_____

Name _____

national	grand	carved	clues
landmark	massive	monument	traces

Use the context clues in each sentence to help you decide which vocabulary word fits best in the blank.

The art museum was one of Phoebe's favorite places to visit. It was a _____ and an important historical site. In fact, it housed so many great works of art it was considered a _____ treasure by most people. Each time she visited this museum, she smiled. There was always a _____ adventure or story around every corner.

Phoebe loved to visit the sculpture garden. There were dolphins, people, and other creatures _____ out of stone and marble. It impressed her that someone could carefully cut such shapes out of rock.

She loved to see new paintings on display. Some were no bigger than her notebook. However, some were so _____ that she wondered how one person could have painted them!

Today, Phoebe was eager to see a _____ that was on loan from another museum. The memorial was over three hundred years old and had been found in Italy. Historians felt that the piece provided _____ about a little-known artist. It also told a story about life in a small Italian village hundreds of years ago.

As she walked to the exhibit, Phoebe wondered if years from now someone would be looking at one of her own paintings to find _____ or evidence about what life used to be like. The thought made her want to create a new painting when she returned home!

NAME _____ DATE _____

Sam's Pet Graph

Sam asked his classmates to choose their favorite pets. The bar graph shows how many students chose each pet.

Favorite Pets
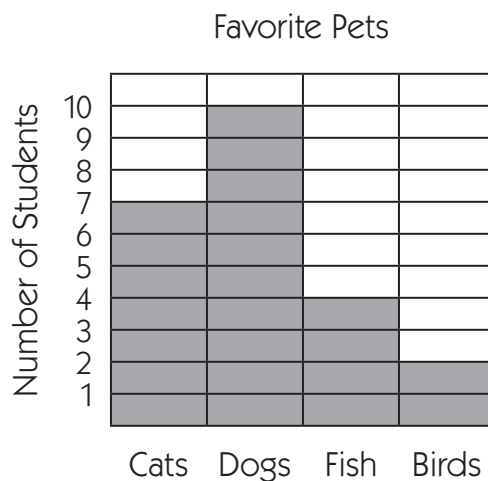
1 Which pet did the greatest number of students choose?

2 How many students chose fish?

3 How many more students chose dogs than cats?

4 How many more students chose cats than birds?

5a Write another question you could answer by looking at this graph.
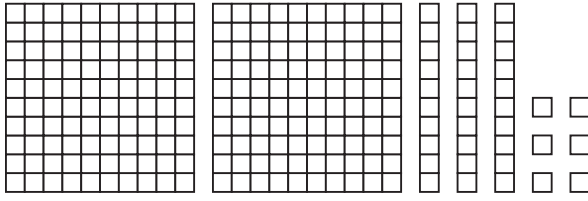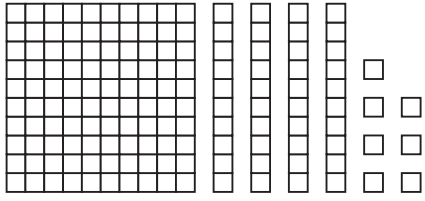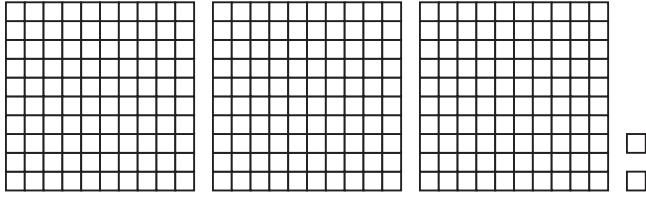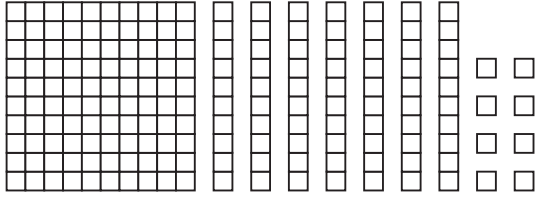
b Write the answer to your question here:

NAME _____   DATE _____

Numbers in the Hundreds

1 Write the number that matches each picture.

example _236_	**a** _____
b _____	**c** _____

2 Write each pair of numbers. Then use a greater than (>) or less than (<) symbol to compare them.

			compare with > or <
ex	four hundred eighty-three	four hundred thirty-eight	compare with > or <
	483	438	483 > 438
a	two hundred twenty-six	two hundred sixty-two	compare with > or <
b	three hundred seven	three hundred seventeen	compare with > or <
c	eight hundred ninety-four	eight hundred forty-nine	compare with > or <

NAME _____   DATE _____

Jorge's Saving Plans

Jorge wants to buy a digital music player that costs $50. He offered to water his neighbor's plants for $5 per week. The graph below shows how much money Jorge will have if he saves it all.

Money Jorge Will Earn

Total Dollars Earned (y-axis: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65)

Number of Weeks (x-axis: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13)
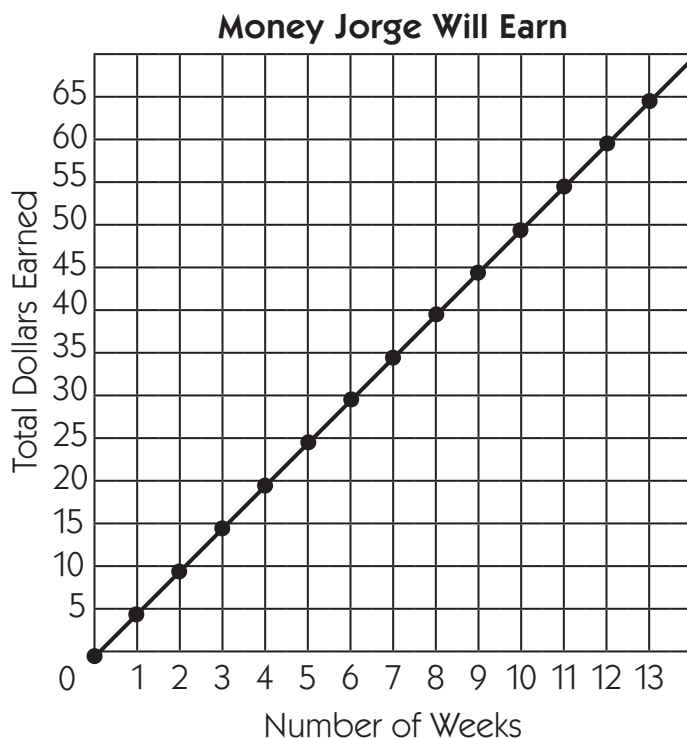
1 How long will it take Jorge to earn $20? _____ weeks

2 How long will it take Jorge to earn enough money to buy the music player?

_____ weeks

3 How many weeks would it take for Jorge to earn $60? _____ weeks

CHALLENGE

4 If Jorge spent $20 after the 7th week, how many weeks in all would it take him to have enough money to buy the music player?

NAME _____ DATE _____

Missing Numbers Fill-In

1 Fill in the missing numbers in the make ten addition facts.

5 + ____ = 10   ____ + 3 = 10   6 + ____ = 10   10 = ____ + 8

0 + ____ = 10   9 + ____ = 10   10 = ____ + 7   10 = 4 + ____

2 Fill in the missing numbers in the equations below.

2 + ____ = 4   16 = ____ + 8   6 = 3 + ____   ____ = 9 + 9

5 + ____ = 10   ____ + 6 = 12   8 = ____ + 4   7 + 7 = ____

3 Fill in the missing numbers to complete the subtraction facts.

```
  1 5        1 3        1 8        1 1        1 6       [   ]
- [ ]      -   3      - [ ]      - [ ]      -   9      -   3
─────      ─────      ─────      ─────      ─────      ─────
    8      [    ]          9          4      [ ]            8
```

```
  1 7        1 2        1 1        1 2       [   ]        1 3
- [ ]      -   3      -   2      - [ ]      -   2      - [ ]
─────      ─────      ─────      ─────      ─────      ─────
    9      [ ]        [ ]            9        1 2            8
```

⚡ **CHALLENGE**

4 What is one way the equations in problem 2 are alike?

NAME _____   DATE _____

Name the Fraction

1 Fill in the bubble next to the fraction that shows how much of each shape is filled in.

example	a
● $\frac{1}{2}$ ○ $\frac{1}{3}$ ○ $\frac{1}{4}$	○ $\frac{1}{2}$ ○ $\frac{1}{3}$ ○ $\frac{1}{4}$
b	**c**
○ $\frac{1}{2}$ ○ $\frac{1}{3}$ ○ $\frac{1}{4}$	○ $\frac{1}{2}$ ○ $\frac{1}{3}$ ○ $\frac{1}{4}$
c	**e**
○ $\frac{1}{2}$ ○ $\frac{1}{3}$ ○ $\frac{1}{4}$	○ $\frac{1}{2}$ ○ $\frac{1}{3}$ ○ $\frac{1}{4}$

⚡ **CHALLENGE**

2 Follow the instructions to color the array at the right.
- Color half the squares in the array red.
- Color one-fourth of the squares in the array blue.
- Color the rest of the squares in the array green.

What fraction of the array is green?

NAME _____   DATE _____

Related Addition & Subtraction Facts

1 Complete these addition facts.

4	5	8	3	5	10	4
+ 6	+ 5	+ 2	+ 7	+ 6	+ 3	+ 10

2 Complete these addition facts. Use the answers above to help.

4	7	8	8	8	9	9
+ 7	+ 5	+ 4	+ 5	+ 6	+ 4	+ 3

3 Complete these subtraction facts.

9	11	12	13	12	11	12
− 4	− 4	− 7	− 8	− 4	− 5	− 6

14	13	11	14	14	10	14
− 8	− 5	− 7	− 7	− 6	− 5	−5

⚡ **CHALLENGE**

4 Solve these addition problems.

150	250	350	440	140	220	170
+ 150	+ 140	+ 260	+ 460	+ 670	+ 480	+ 530

5 Solve these subtraction problems.

130	480	129	100	300	250	140
− 3	− 140	− 13	− 4	− 97	− 25	− 29
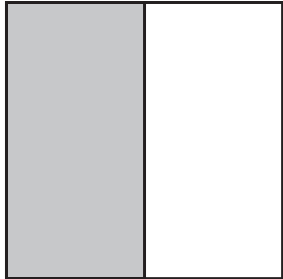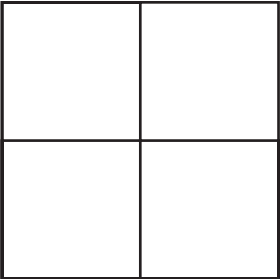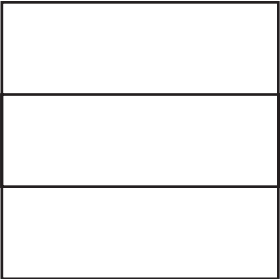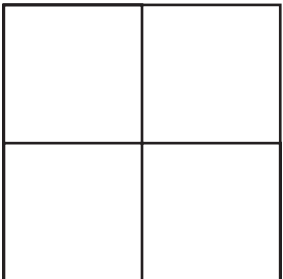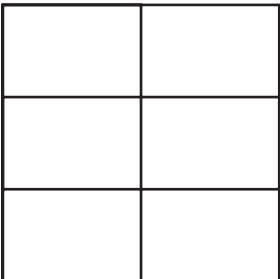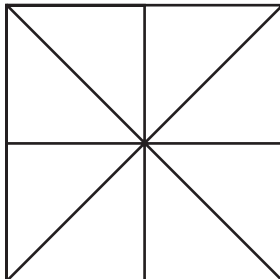
NAME _____   DATE _____

Fraction Fill-Ins

1 Shade in each square to show the fraction.

example $\frac{1}{2}$	**a** $\frac{1}{4}$	**b** $\frac{1}{3}$

| **c** $\frac{2}{4}$	⚡ **d** $\frac{4}{6}$	⚡ **e** $\frac{3}{8}$

⚡ **CHALLENGE**

2 Follow the instructions to color the circle.

- Color $\frac{2}{8}$ of the circle red.
- Color $\frac{3}{8}$ of the circle green.
- Color $\frac{1}{8}$ of the circle yellow.
- Color the rest of the circle blue.
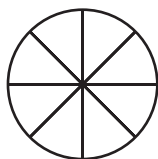
What fraction of the circle is blue?

3 Follow the instuctions to color the rectangle.

- Color $\frac{1}{4}$ of the rectangle purple.
- Color $\frac{2}{4}$ of the rectangle orange.
- Color $\frac{1}{12}$ of the rectangle blue.
- Color the rest of the rectangle brown.
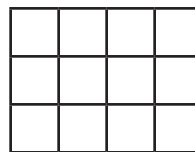
What fraction of the rectangle is brown?

NAME _____   DATE _____

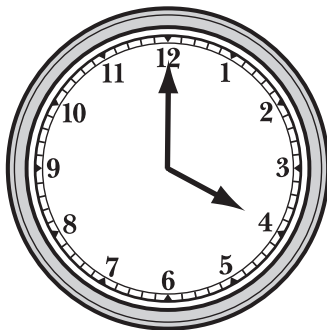# Telling Time to the Hour, Half Hour & Quarter Hour
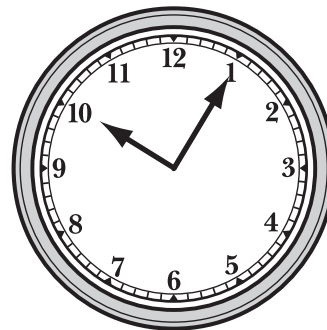
1 What time does each clock show?

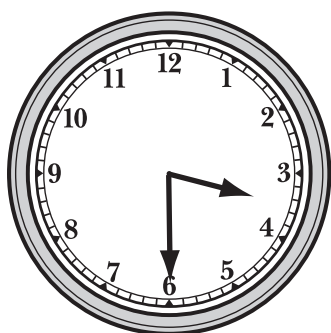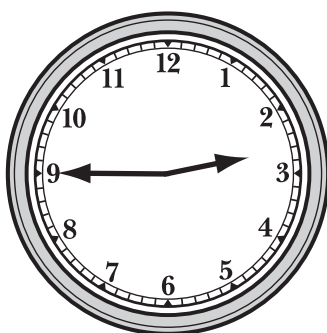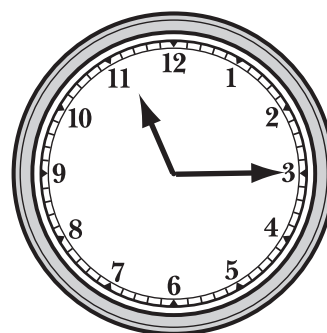| example	a	b
8:00		
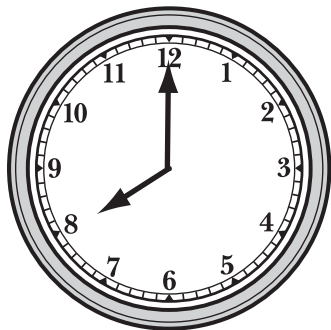
c	d	e

⚡ **CHALLENGE**

2 Which clock above shows "quarter past eleven"?

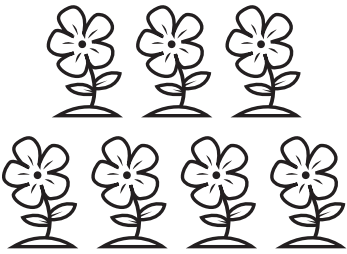**3** Which clock above shows "quarter till three"?
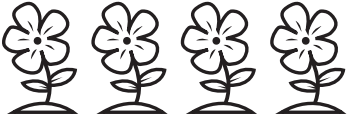
4 Which clock above shows "half past three"?

NAME _____   DATE _____

Leaves & Flower Petals

Answer each question below. Write an addition or multiplication equation to show how you figured it out.

| Picture	Answer the question.	Write an equation.
example	There are 3 flowers. How many *leaves*? 6	2 + 2 + 2 = 6 or 3 × 2 = 6
1	There are 3 flowers. How many *petals*?	
2	There are 7 flowers. How many *leaves*?	
3	There are 4 flowers. How many *petals*?	

NAME _____   **DATE** _____

Bamboo Shoot Growth Graph

In the spring, new bamboo shoots can grow up to 1 foot per day. Once they reach their full height, the shoots stop growing. The graph below shows how one shoot grew for 13 days.

1 How tall was the shoot on the 13th day?

2 On what day was the shoot about $6\frac{1}{2}$ feet tall?

3 Did the shoot ever get shorter in the 13 days?

Growth of a Bamboo Shoot

Total Height in Feet (y-axis: 0–11)
Number of Days (x-axis: 0–13)
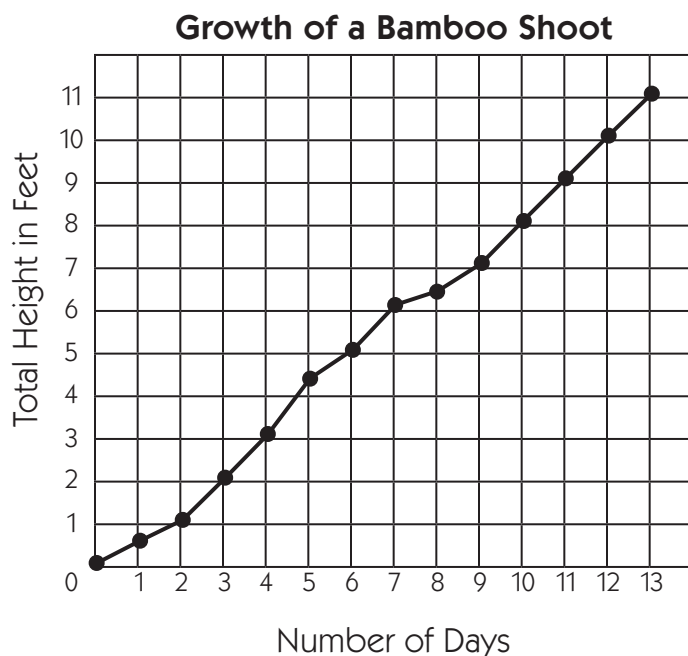
4a Did the shoot grow the same amount every day?

b Explain how you can tell.

CHALLENGE

5 There are 36 inches in 1 yard. The shoot was 84 inches on the ninth day. Was it more or less than 2 yards tall? Exactly how much more or less? Show all your work.