Name _____

Time to the Minute

Common Core **COMMON CORE STANDARD—3.MD.A.1**
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Write the time. Write one way you can read the time.

1. 
1:16; sixteen minutes after one

2. 

3. 

4. 

5. 

6. 

Write the time another way.

7. 23 minutes after 4

8. 18 minutes before 11

Problem Solving Real World

9. What time is it when the hour hand is a little past the 3 and the minute hand is pointing to the 3?

10. Pete began practicing at twenty-five minutes before eight. What is another way to write this time?

11. WRITE Math Draw a clock showing a time to the nearest minute. Write the time as many different ways you can.

Lesson Check (3.MD.A.1)

1. What is another way to write 13 minutes before 10?

2. What time does the clock show?

Spiral Review (3.OA.A.1, 3.OA.A.2, 3.OA.A.4, 3.OA.B.6)

3. Each bird has 2 wings. How many wings do 5 birds have?

4. Find the unknown factor.

$8 \times \square = 56$

5. Mr. Wren has 56 paintbrushes. He places 8 paintbrushes on each of the tables in the art room. How many tables are in the art room?

6. What number completes the equations?

$4 \times \blacktriangle = 20 \quad 20 \div 4 = \blacktriangle$

FOR MORE PRACTICE GO TO THE Personal Math Trainer

Name _____

A.M. and P.M.

Common Core **COMMON CORE STANDARD—3.MD.A.1**
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Write the time for the activity. Use A.M. or P.M.

1. eat lunch

12:20 P.M.

2. go home after school

3. see the sunrise

4. go for a walk

5. go to school

6. get ready for art class

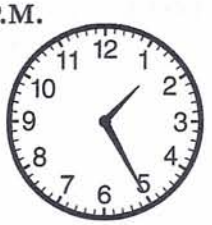
Write the time. Use A.M. or P.M.

7. one half hour past midnight

8. one-half hour after 4:00 in the morning

Problem Solving Real World

9. Jaime is in math class. What time is it? Use A.M. or P.M.



10. Pete began practicing his trumpet at fifteen minutes past three. Write this time using A.M. or P.M.

11. WRITE *Math* Write your schedule for today. List each activity with its starting time. Write A.M. or P.M. for each time.

Lesson Check (3.MD.A.1)

1. Steven is doing his homework. What time is it? Use A.M. or P.M.

2. After he finished breakfast, Mr. Edwards left for work at fifteen minutes after seven. What time is this? Use A.M. or P.M.

Spiral Review (3.OA.B.6, 3.NBT.A.2, 3.NBT.A.3, 3.NF.A.3d)

3. What division equation is related to the multiplication equation

$$4 \times 6 = 24?$$

4. There are 50 toothpicks in each box. Jaime buys 4 boxes for her party platter. How many toothpicks does Jaime buy?

5. A pet store sold 145 bags of beef-flavored dog food and 263 bags of cheese-flavored dog food. How many bags of dog food were sold?

6. Compare. Write $<$, $>$, or $=$.

$$\frac{3}{6} \bigcirc \frac{4}{6}$$

FOR MORE PRACTICE GO TO THE Personal Math Trainer

Name _____

Measure Time Intervals

Common Core **COMMON CORE STANDARD—3.MD.A.1**
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Find the elapsed time.

1. Start: 8:10 A.M. End: 8:45 A.M.

35 minutes

2. Start: 6:45 P.M. End: 6:54 P.M.

3. Start: 3:00 P.M. End: 3:37 P.M.

4. Start: 5:20 A.M. End: 5:47 A.M.

Problem Solving Real World

5. A show at the museum starts at 7:40 P.M. and ends at 7:57 P.M. How long is the show?

6. The first train leaves the station at 6:15 A.M. The second train leaves at 6:55 A.M. How much later does the second train leave the station?

7. WRITE *Math* Describe two different methods to find the elapsed time from 2:30 P.M. to 2:58 P.M.

Lesson Check (3.MD.A.1)

1. Marcus began playing basketball at 3:30 P.M. and stopped playing at 3:55 P.M. For how many minutes did he play basketball?

2. The school play started at 8:15 P.M. and ended at 8:56 P.M. How long was the school play?

Spiral Review (3.OA.A.1, 3.OA.B.6, 3.NBT.A.2, 3.NBT.A.3)

3. Each car has 4 wheels. How many wheels do 7 cars have?

4. What number completes the equations?

$3 \times \square = 27 \quad 27 \div 3 = \square$

5. There are 20 napkins in each package. Kelli bought 8 packages for her party. How many napkins did Kelli buy in all?

6. Mr. Martin drove 290 miles last week. This week he drove 125 miles more than last week. How many miles did Mr. Martin drive this week?

FOR MORE PRACTICE GO TO THE Personal Math Trainer

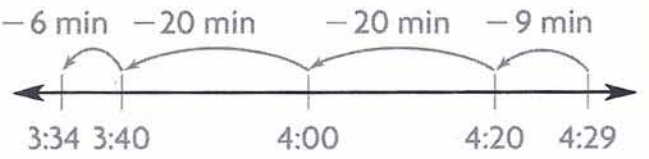
Name _____

Use Time Intervals

Common Core **COMMON CORE STANDARD—3.MD.A.1**
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Find the starting time.

1. Ending time: 4:29 P.M.
   Elapsed time: 55 minutes



3:34 P.M.

2. Ending time: 10:08 A.M.
   Elapsed time: 30 minutes

Find the ending time.

3. Starting time: 2:15 A.M.
   Elapsed time: 45 minutes

4. Starting time: 6:57 P.M.
   Elapsed time: 47 minutes

Problem Solving Real World

5. Jenny spent 35 minutes doing research on the Internet. She finished at 7:10 P.M. At what time did Jenny start her research?

6. Clark left for school at 7:43 A.M. He got to school 36 minutes later. At what time did Clark get to school?

7. WRITE Math Describe a situation in your life when you need to know how to find a starting time.

Lesson Check (3.MD.A.1)

1. Cody and his friends started playing a game at 6:30 P.M. It took them 37 minutes to finish the game. At what time did they finish?

2. Delia worked for 45 minutes on her oil painting. She took a break at 10:35 A.M. At what time did Delia start working on the painting?

Spiral Review (3.OA.A.2, 3.OA.C.7, 3.MD.A.1)

3. Sierra has 30 collector's pins. She wants to put an equal number of pins in each of 5 boxes. How many pins should she put in each box?

4. What time is shown on the clock?

5. Ricardo has 32 books to put on 4 shelves. He puts the same number of books on each shelf. How many books does Ricardo put on each shelf?

6. Jon started playing a computer game at 5:35 P.M. He finished the game at 5:52 P.M. How long did Jon play the game?

Name _____

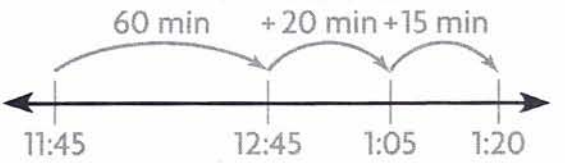
Problem Solving • Time Intervals

Common Core

COMMON CORE STANDARD—3.MD.A.1
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Solve each problem. Show your work.

1. Hannah wants to meet her friends downtown. Before leaving home, she does chores for 60 minutes and eats lunch for 20 minutes. The walk downtown takes 15 minutes. Hannah starts her chores at 11:45 A.M. At what time does she meet her friends?



1:20 P.M.

2. Katie practiced the flute for 45 minutes. Then she ate a snack for 15 minutes. Next, she watched television for 30 minutes, until 6:00 P.M. At what time did Katie start practicing the flute?

_____

3. Nick gets out of school at 2:25 P.M. He has a 15-minute ride home on the bus. Next, he goes on a 30-minute bike ride. Then he spends 55 minutes doing homework. At what time does Nick finish his homework?

_____

4. WRITE ▸ *Math* Write a multistep word problem that has at least two amounts of elapsed time. The problem may require finding a starting time or ending time. Include a solution.

_____

_____

Lesson Check (3.MD.A.1)

1. Gloria went to the mall and spent 50 minutes shopping. Then she had lunch for 30 minutes. If Gloria arrived at the mall at 11:00 A.M., at what time did she finish lunch?

2. The ball game begins at 2:00 P.M. It takes Ying 30 minutes to get to the ballpark. At what time should Ying leave home to get to the game 30 minutes before it starts?

Spiral Review (3.OA.A.2, 3.OA.A.4, 3.NF.A.2, 3.NF.A.3d)

3. Write the fractions $\frac{2}{4}$, $\frac{2}{8}$, and $\frac{2}{6}$ in order from least to greatest.

4. Find the unknown factor.

$$6 \times \square = 36$$

5. There were 405 books on the library shelf. Some books were checked out. Now there are 215 books left on the shelf. How many books were checked out?

6. Savannah has 48 photos. She places 8 photos on each page of her photo album. How many pages in the album does she use?

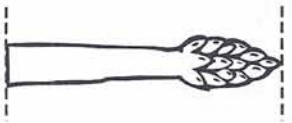
FOR MORE PRACTICE GO TO THE Personal Math Trainer

Name _____

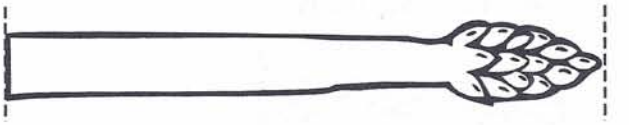
Measure Length

Common Core **COMMON CORE STANDARD—3.MD.B.4**
Represent and interpret data.

Measure the length to the nearest half inch.

1. 

$1\frac{1}{2}$ inches

2. 

_____ inches

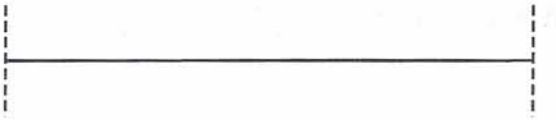
3. 

_____ inches

Measure the length to the nearest fourth inch.

4. 

_____ inches

5. 

_____ inches

Problem Solving Real World

Use a separate sheet of paper for 6.

6. Draw 8 lines that are between 1 inch and 3 inches long. Measure each line to the nearest fourth inch, and make a line plot.

7. Alex's dog has a tail that is $5\frac{1}{4}$ inches long. On a ruler, what inch marks are closest to $5\frac{1}{4}$ inches? Name two inch marks.

_____

_____

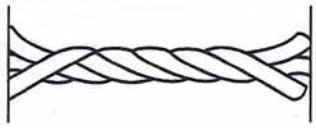
8. WRITE Math Measure the lengths of 10 color pencils to the nearest fourth inch. Then make a line plot of the data.

_____

_____

Lesson Check (3.MD.B.4)

1. What is the length of the string to the nearest half inch?



2. What is the length of the leaf to the nearest fourth inch?

Spiral Review (3.OA.C.7, 3.MD.A.1)

3. Write the equations included in the same set of related facts as $6 \times 8 = 48$.

4. Brooke says there are 49 days until July 4. There are 7 days in a week. In how many weeks will it be July 4?

5. It is 20 minutes before 8:00 in the morning. What time is this? Use A.M. or P.M.

6. Marcy played the piano for 45 minutes. She stopped playing at 4:15 P.M. At what time did she start playing the piano?

Name _____

Estimate and Measure Liquid Volume

Common Core

COMMON CORE STANDARD—3.MD.A.2
Solve problems involving measurement and estimation of intervals of time, liquid measures, and masses of objects.

Estimate how much liquid volume there will be when the container is filled. Write *more than 1 liter, about 1 liter,* or *less than 1 liter.*

1. large milk container

more than 1 liter

2. small milk container

_____

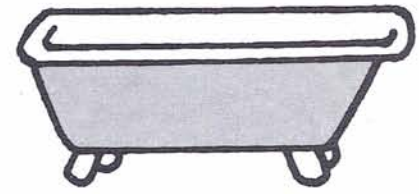
3. water bottle

_____

4. spoonful of water

_____

5. bathtub



_____

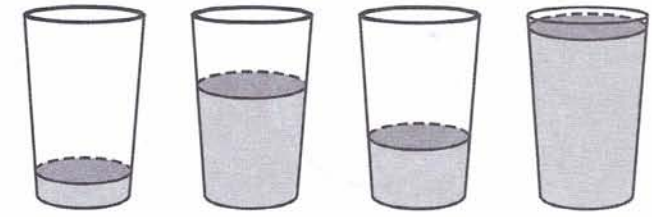
6. eyedropper

_____

Problem Solving Real World

Use the pictures for 7. Alan pours water into four glasses that are the same size.

7. Which glass has the most amount of water? _____



A B C D

8. WRITE Math Name a container that you see at home that when filled has a liquid volume of about 1 liter.

_____

_____

Lesson Check (3.MD.A.2)

1. Felicia filled the bathroom sink with water. Is the amount more than 1 liter, about 1 liter, or less than 1 liter?

2. Kyle needed about 1 liter of water to fill a container. Did Kyle most likely fill a small glass, a spoon, or a vase?

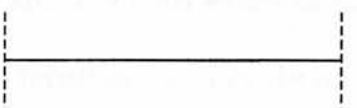
Spiral Review (3.OA.B.5, 3.NF.A.1, 3.MD.A.1, 3.MD.B.4)

3. Cecil had 6 ice cubes. He put 1 ice cube in each glass. In how many glasses did Cecil put ice cubes?

4. Juan has 12 muffins. He puts $\frac{1}{4}$ of the muffins in a bag. How many muffins does Juan put in the bag?

5. What time is shown on the clock?

6. Julianne drew the line segment below. Use your ruler to measure the segment to the nearest fourth inch.



FOR MORE PRACTICE GO TO THE Personal Math Trainer

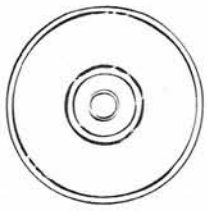
Name _____

Estimate and Measure Mass

Common Core **COMMON CORE STANDARD—3.MD.A.2**
Solve problems involving measurement and intervals of time, liquid volumes, and masses of objects.

Choose the unit you would use to measure the mass. Write *gram* or *kilogram*.

1. CD

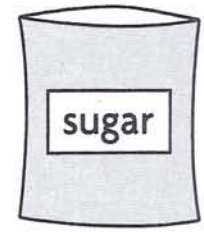


gram

2. boy

_____

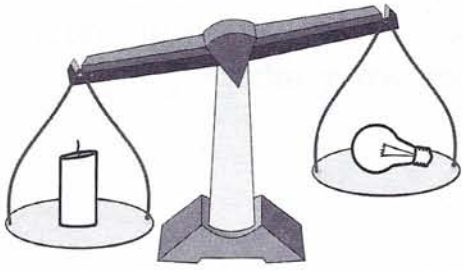
3. bag of sugar



_____

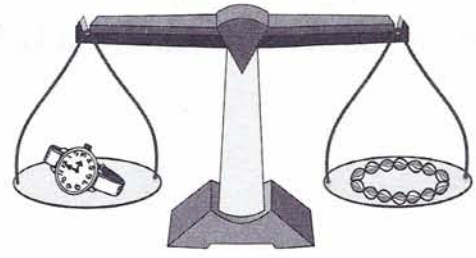
Compare the masses of the objects. Write *is less than*, *is the same as*, or *is more than*.

4.



The mass of the candle _____ the mass of the light bulb.

5.



The mass of the watch _____ the mass of the necklace.

Problem Solving Real World

6. A red ball has a mass that is less than 1 kilogram. A blue ball has a mass of 1 kilogram. Is the mass of the blue ball more than or less than the mass of the red ball?

_____

7. Brock's dog is a collie. To find the mass of his dog, should Brock use *grams* or *kilograms*?

_____

8. WRITE *Math* Name an object in your home that has a mass of about 1 kg.

_____

_____

Lesson Check (3.MD.A.2)

1. Which unit of measure would you use to measure the mass of a grape? Write *gram* or *kilogram*.

2. Elsie wants to find the mass of her pony. Which unit should she use? Write *gram* or *kilogram*.

Spiral Review (3.OA.A.2, 3.OA.D.8, 3.MD.A.2)

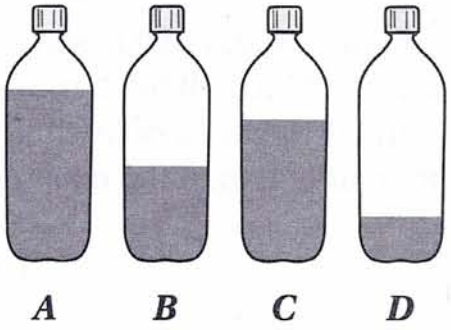
3. Marsie blew up 24 balloons. She tied the balloons together in groups of 4. How many groups did Marsie make?

4. Clark used the order of operations to find the unknown number in $15 - 12 \div 3 = n$. What is the value of the unknown number?

Use the pictures for 5–6. Ralph pours juice into four bottles that are the same size.

5. Which bottle has the most amount of juice?

6. Which bottle has the least amount of juice?



Name _____

Solve Problems About Liquid Volume and Mass

Common Core

COMMON CORE STANDARD—3.MD.A.2
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Write an equation and solve the problem.

1. Luis was served 145 grams of meat and 217 grams of vegetables at a meal. What was the total mass of the meat and the vegetables?

   Think: Add to find how much in all.

   145 + 217 = ____ ____

2. The gas tank of a riding mower holds 5 liters of gas. How many 5-liter gas tanks can you fill from a full 20-liter gas can?

   ____ ◯ ____ = ____ ____

3. To make a lemon-lime drink, Mac mixed 4 liters of lemonade with 2 liters of limeade. How much lemon-lime drink did Mac make?

   ____ ◯ ____ = ____ ____

4. A nickel has a mass of 5 grams. There are 40 nickels in a roll of nickels. What is the mass of a roll of nickels?

   ____ ◯ ____ = ____ ____

Problem Solving Real World

5. Zoe's fish tank holds 27 liters of water. She uses a 3-liter container to fill the tank. How many times does she have to fill the 3-liter container in order to fill her fish tank?

   _____

6. Adrian's backpack has a mass of 15 kilograms. Theresa's backpack has a mass of 8 kilograms. What is the total mass of both backpacks?

   _____

7. WRITE ▸ *Math* Write a problem that can be solved with a bar model that shows equal groups of liters. Then solve the problem.

   _____

   _____

Lesson Check (3.MD.A.2)

1. Mickey's beagle has a mass of 15 kilograms. His dachshund has a mass of 13 kilograms. What is the combined mass of the two dogs?

2. Lois put 8 liters of water in a bucket for her pony. At the end of the day, there were 2 liters of water left. How much water did the pony drink?

Spiral Review (3.OA.D.8, 3.NF.A.3d, 3.MD.A.1, 3.MD.A.2)

3. Josiah has 3 packs of toy animals. Each pack has the same number of animals. Josiah gives 6 animals to his sister Stephanie. Then Josiah has 9 animals left. How many animals were in each pack?

4. Tom jogged $\frac{3}{10}$ mile, Betsy jogged $\frac{5}{10}$ mile, and Sue jogged $\frac{2}{10}$ mile. Who jogged a distance longer than $\frac{4}{10}$ mile?

5. Bob started mowing at 9:55 A.M. It took him 25 minutes to mow the front yard and 45 minutes to mow the back yard. At what time did Bob finish mowing?

6. Juliana wants to find the mass of a watermelon. What unit should she use?

FOR MORE PRACTICE GO TO THE Personal Math Trainer