MCMS
6th Grade
NTI Packet
Day 21

Grade 6 Math : Divide Decimals by Decimals

Select the correct answer(s) from the given options:

Do NOT use a calculator.

1. Divide: 0.8 ÷ 0.4 =
   a) 2
   b) 2.2
   c) 0.2
   d) 0.02

2. Divide: 16.8 ÷ 3.2 =
   a) 52.5
   b) 5.25
   c) 5.52
   d) 5.2

3. Divide: 27.84 ÷ 7.5 =
   a) 37.12
   b) 371.2
   c) 3.812
   d) 3.712

4. Divide: 48.38 ÷ 8.2 =
   a) 5.9
   b) 5.8
   c) 59
   d) 5.7

5. Divide: 566.25 ÷ 45.3 =
   a) 16.5
   b) 1.25
   c) 15.2
   d) 12.5

6. Divide: 35.775 ÷ 7.5 =
   a) 40.7
   b) 4.07
   c) 47.7
   d) 4.77

7. Divide: 9 tenths ÷ 3 tenths =
   a) 0.3
   b) 30
   c) 3
   d) 0.03

8. Divide: 18 tenths ÷ 3 tenths =
   a) 60
   b) 0.6
   c) 6
   d) 0.06

9. Divide: 24 hundredths ÷ 6 hundredths =
   a) 0.4
   b) 0.04
   c) 40
   d) 4

Select the correct answer(s) from the given options:

1. Write the ratio as a rate.The ratio of miles to the numbers of hours is 300 to 6
   a) 50 miles/hour
   b) 300 miles/hour
   c) 60 miles/hour
   d) 25 miles/hour

2. Write the ratio as a rate. The ratio of feet to the number of seconds is 90 to 30
   a) 30 feet/second
   b) 3 feet/second
   c) 60 feet/second
   d) 15 feet/second

3. Write the ratio as a rate. The ratio of books to number of students is 72 to 12
   a) 5 books per student
   b) 8 books per student
   c) 6 books per student
   d) 4 books per student

4. Write the unit rate. 8 boxes can hold 72 books
   a) 7 books per box
   b) 8 books per box
   c) 9 books per box
   d) 6 books per box

5. Write the unit rate. 85 liters of water in 5 containers
   a) 16 liters per container
   b) 15 liters per container
   c) 17 liters per container
   d) 18 liters per container

6. Write the unit rate. 90 copies in 9 minutes
   a) 9 copies per minute
   b) 11 copies per minute
   c) 12 copies per minute
   d) 10 copies per minute

7. Write the unit rate. Typing 330 words in 3 minutes
   a) 33 words per minute
   b) 100 words per minute
   c) 110 words per minute
   d) 110 words per hour

8. Write the unit rate. 8 hours to cover 304 kilometers
   a) 32 kilometer per hour
   b) 38 kilometer per hour
   c) 34 kilometer per hour
   d) 36 kilometer per hour

9. Write the unit rate. 84 copies in 7 minutes
   a) 10 copies per minute
   b) 14 copies per minute
   c) 12 copies per minute
   d) 16 copies per minute

10. Write the unit rate. Earn $88 for 8 hours of work
   a) 10 dollars per hour of work
   b) 11 dollars per hour of work
   c) 12 dollars per hour of work
   d) 8 dollars per hour of work

11. Write the unit rate. 330 pencils in 22 boxes
   a) 25 pencils per box
   b) 16 pencils per box
   c) 14 pencils per box
   d) 15 pencils per box

12. Write the unit rate. 2400 meters in 20 second
   a) 12 meters/second
   b) 1200 meters/second
   c) 120 meters/second
   d) 140 meters/second

13. Write the unit rate. 25 boxes can hold 150 books
   a) 5 books per box
   b) 6 books per box
   c) 4 books per box
   d) 8 books per box

14. Write the unit rate. 225 students in 5 buses
   a) 42 students per bus
   b) 40 students per bus
   c) 46 students per bus
   d) 45 students per bus

15. Write the unit rate. 343 miles in 7 hours
   a) 49 miles/hour
   b) 58 miles/hour
   c) 59 miles/hour
   d) 48 miles/hour

Read the selection and choose the best answer to each question. Then fill in the answer on your answer document.

6th English
Day # 21

A Picture of Peace

1 When she was just seven years old, Michelle knew with certainty that she wanted to be a photographer when she grew up. That year she received her first camera, a small disposable one to use on the family vacation. At first she randomly clicked the button, not giving much thought to what she was doing. When her father examined her blurred images and aimless shots, he advised Michelle to look through the lens and think about what the resulting picture would look like. The next day Michelle saw a family of ducks, and remembering what her father had said, she lay down on the ground and waited for a duckling to waddle near her. That picture still hangs on her bedroom wall.

2 Now, six years later, Michelle was attempting to capture a sunset for a local photography contest. She groaned as storm clouds rolled in before the sun had a chance to cast its vibrant colors across the sky.

3 "Mom, I don't think I'm ever going to get this shot!" Michelle complained, putting her camera equipment on the kitchen table and sighing with exasperation.

4 "Still no luck?" Mom asked. "Why don't you use one of your previous photographs? You have some captivating pictures on the computer."

5 "I can't—the contest rules specifically say the photos have to be taken with a traditional camera, not a digital one. We turn in the roll of film, it gets developed, and then we choose which picture we want to enter into the contest, just to make sure everything is fair."

6 "I hope the weather clears up by the weekend, then, but I'm wondering why a sunset is so important," Mom mused.

7 "The theme of the contest is tranquillity," Michelle explained. "I have pictures of the cat lounging in the sun, light reflecting off the calm water in the pond—images like that. But honestly, I feel most peaceful when I study the colorful display of an evening sunset, and I'm hoping the contest judges will feel the same way when they see a picture of the sunset," Michelle said with another sigh.

8 Six-year-old Zach came out of his room when he saw Michelle. "Hi! What are you doing? Are you going to take more pictures? You want to take a picture of me? Look!" Zach put both arms over his head in a muscle-man pose.

9 "Not right now, Zach," said Michelle, laughing at his juvenile antics. "I have to do my homework and think about something besides the contest." Zach frowned and went back into his room.



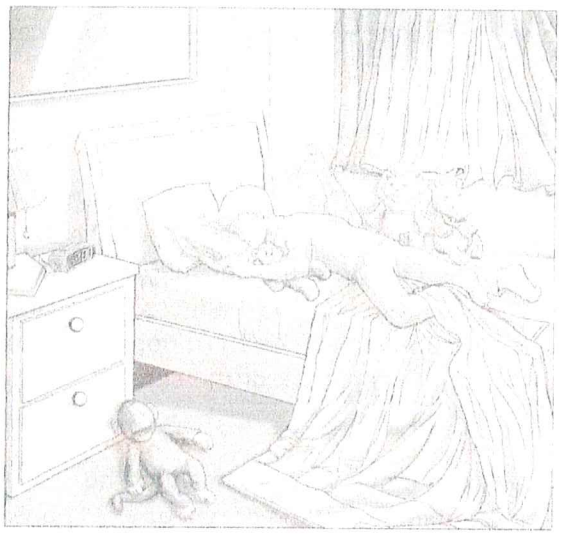
10 The next afternoon Michelle felt inspired when she saw clear skies, so she again set up her equipment on the hill behind her house as Zach ambled along beside her. Soon the sky glowed orange, gold, and pink as the sun drifted toward the horizon.

11 "This is it, Zach," Michelle whispered hopefully as she carefully lined up her shot. "If the colors show up just right, I think I'll have the winning picture."

12 "It's just a silly sunset. They happen all the time. I think you should take one of me . . . see, I can be peaceful." Zach closed his eyes and lay on the grass.

13 Michelle grinned. "Maybe tomorrow; I'm waiting till the sun reaches the ground. Right . . . about . . . now." Michelle clicked the camera button. "That was perfect!" she exclaimed triumphantly. "Let's go home."

14 The next morning Michelle woke earlier than usual, pleased with her picture-taking accomplishments. Picking up her camera, she paused, noticing that she could take one more picture to complete the roll of film. She walked across the hall to Zach's room and stood outside the door. "Hey, buddy, want me to take your picture now?" When she heard nothing in response, she opened the door and peered inside. Zach, normally as active as a fly in a doughnut shop, was on his stomach sleeping quietly. Stuffed animals were scattered around him, a teddy bear was tucked under one arm, and a blanket was wrapped possessively around one foot. Sunlight cast its beam across his back. Carefully Michelle knelt down and took a picture. "Mom will like this," she thought, as she shut Zach's door quietly.



15 A week later Michelle hurried her mother into the photo shop that was hosting the contest. The clerk handed her the envelope with her pictures in it and reminded her: "Remember, there is a one picture maximum, and it must be from this group of photos."

16 Michelle nodded as she moved to a table. Her hands trembled as she opened the envelope, and she began to look at her pictures one by one. The cat one was cheery; he certainly looked content. The pond picture was tranquil, too, with its still water. But the sunset picture was the one she was most eager to see. There it was: bright colors layered toward the sky, and the sun delicately balanced on the horizon. It was as near perfection as Michelle had dreamed it would be.

17 Then, as she casually glanced at the last photo, she paused. Her eyebrows rose as she studied the photo of Zach. She looked back at her photograph of the sunset, which suddenly seemed less perfect. She deliberated on the better choice until the clerk called for final submissions.

18 "Here it is—my winning entry," Michelle announced, handing over the last picture of the bunch.

1 Read this sentence from paragraph 14.

> *Zach, normally as active as a fly in a doughnut shop, was on his stomach sleeping quietly.*

The author's use of a simile in this sentence conveys to the reader that Zach usually —

A has trouble falling asleep

B feels sick from eating sweets

C has a great amount of energy

D likes to sleep late in the morning

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2 What is the main theme of the story?

F Recognizing an unexpected opportunity can have surprising results.

G Enjoying an activity is more important than winning.

H Younger siblings require a lot of patience and kindness.

J It is more rewarding to work with others on a task than to work alone.

3 Read the dictionary entry.

> **capture** \'kap-chər\ *v*
> **1.** to gain control by force **2.** to hold someone's interest **3.** to take an opponent's piece in a game **4.** to preserve a mood, scene, or quality

Which definition most closely matches the way the word capture is used in paragraph 2?

A Definition 1

B Definition 2

C Definition 3

D Definition 4

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4 What is the best summary of the story?

F Michelle has been interested in photography since she was seven years old. She decides to enter a photography contest hosted by a local photo shop and must take a picture to express the theme of the contest, which is tranquillity. She takes pictures of a sunset, a cat, a still pond, and her sleeping brother.

G Michelle tries to take a photograph of a sunset for a contest. Her little brother is very interested in what she is doing, and he wants her to take a photograph of him. After she is satisfied with her sunset picture, Michelle photographs her brother while he is sleeping.

H Michelle has difficulty photographing a sunset for a photography contest she wants to enter. She finally gets a good sunset picture, and she also takes a picture of her sleeping brother. At the last minute she selects the photo she thinks best illustrates the contest theme of tranquillity.

J Michelle enters a photography contest that requires the use of a traditional camera. The theme of the contest is tranquillity. After getting the pictures developed at the photo shop, Michelle reviews her photos and selects the one she thinks will help her win the contest.

5 Read this sentence from paragraph 10.

> *Soon the sky glowed orange, gold, and pink as the sun drifted toward the horizon.*

In what way does the imagery in the sentence contribute to the story?

A It emphasizes how difficult it is to photograph the colors of a sunset.

B It explains why Michelle thinks a sunset is a good subject for a photo.

C It shows that nature is the best source of inspiration.

D It suggests that Michelle is a talented photographer.

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6 Why are the events in paragraph 14 important to the plot?

F Michelle takes the photo she will decide to submit for the contest.

G Michelle has more film available than she realizes.

H Michelle takes a photo that will please her mother.

J Michelle keeps her promise to her brother.

---

7 Which sentence from the story best supports the idea that taking great photographs requires some effort?

A *When her father examined her blurred images and aimless shots, he advised Michelle to look through the lens and think about what the resulting picture would look like.* (paragraph 1)

B *That picture still hangs on her bedroom wall.* (paragraph 1)

C *"We turn in the roll of film, it gets developed, and then we choose which picture we want to enter into the contest, just to make sure everything is fair."* (paragraph 5)

D *"I have to do my homework and think about something besides the contest."* (paragraph 9)

6th Grade SCIENCE

NTI DAY 21

Gold Team-Log onto READWORKS.ORG to submit your answers

MAROON TEAM- Submit your answers through the MCMS NIT Virtual Classroom

NASA's Stardust Review

In the wee hours of January 15, 2006, stargazers caught a glimpse of an intergalactic treasure chest blazing through Earth's atmosphere. The space capsule plunged to the ground at a speed of about 28,800 miles per hour. Its fiery dive lit up the sky in the western United States. When the container landed safely in the Utah desert, excited scientists from NASA burst into applause.

Stardust, which captured comet dust and space particles, recently completed a 2.9-billion-mile journey. The probe spent seven years exploring space and collecting particles that may hold clues to the solar system's origins.

"We visited a comet, grabbed a piece of it, and [the capsule] landed here," Donald Brownlee, an astronomy professor and the mission's head investigator, told reporters. "It's an incredible thrill."

Stardust's cargo contains more than a million particles. Most of the particles are less than 1/10 the width of a human hair. Scientists could spend decades studying the tiny fragments.

Astronomers had been counting down the days until the container's arrival. *Stardust* was launched on Feb. 7, 1999. Five years later, the probe streaked through a **comet**, collecting dust along the way. A comet is a heavenly body made up of ice and dust that often develops a long, cloudy tail of dust when it is near the sun.

Many scientists believe that comets are leftovers from the formation of the sun and planets about 4.6 billion years ago. Researchers hope that the dust will provide clues to how the solar system was created. It may also help scientists understand how certain materials combined to form life.

"Stardust could provide a new window into the distant past," astronomer Simon Green told reporters.

Comprehension Questions

1. How many years did *Stardust* spend exploring space?

1. **five**
2. **seven**
3. **eight**
4. **two**

2. All of the following were effects of the space capsule's return to Earth EXCEPT

1. **the space capsule lit up the sky and landed safely**
2. **the capsule landed safely in the Utah desert**
3. **the cargo onboard the capsule caught on fire**
4. **excited scientists from NASA burst into applause**

3. Why does the author refer to the space capsule as an "intergalactic treasure chest"?

1. It holds treasures from each planet in our solar system.
2. It was designed to be in the shape of a treasure chest.
3. It is filled with coins and bills from around the world.
4. It contains valuable information about space.

4. Read this sentence from the passage:

"Scientists could spend decades studying the tiny fragments."

In this sentence, the word fragments means

1. parts that are broken off
2. long, cloudy tails of dust
3. fruits that are overripe
4. collections of information

5. Which statement best describes the main idea of this passage?

1. *Stardust* plunged to the ground at a speed of about 28,800 miles per hour.
2. A comet is a heavenly body made up of ice and dust that often forms a tail.
3. Scientists may spend the next few decades studying tiny particles of dust.
4. A space probe's cargo may hold clues to the solar system's origins.

6. When was *Stardust* launched into space?

7. What did astronomer Simon Green mean when he said, "*Stardust* could provide a new window into the distant past"?

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Scientists hope the space dust holds clues _____ how the solar system formed.

1. or
2. to
3. but
4. and

Fact & Opinion Questions

1. Which of the following is an opinion?

1. **Stardust grabbed a piece of the comet's tail.**
2. **Its fiery dive lit up the sky.**
3. **Finding out about comets is thrilling.**
4. **Stardust's cargo had more than a million particles.**

2. What does Simon Green mean when he says, "Stardust could provide a new window into the distant past"?

1. **The windows in Stardust provide a view of distant space.**
2. **Stardust can give scientists information about American history.**
3. **The dust picked up by Stardust could give clues about the origin of the solar system.**
4. **Stardust may be able to be used as a time-machine.**

3. Which of the following is true about comets?

1. **Comets are made from ice.**
2. **Comets are made from dust.**
3. **Comets can have long dusty tails.**
4. **All of the above.**

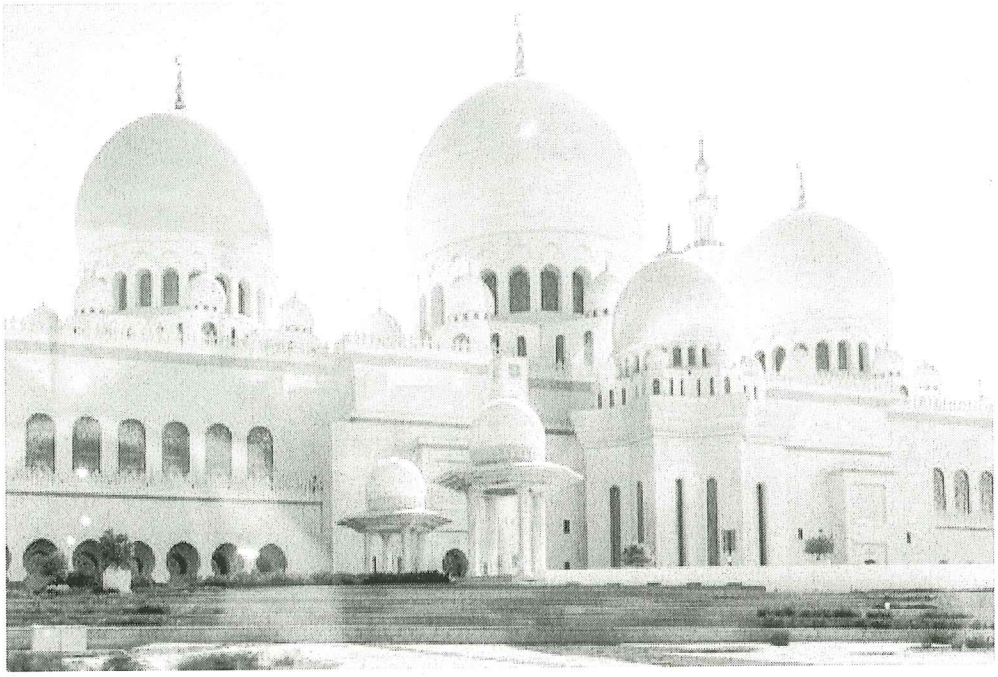
4. An example of an opinion is:

1. **The scientists burst into applause.**
2. **Most of the particles are less than the width of a human hair.**
3. **It may help scientists understand how life was formed.**
4. **Stardust was launched on Feb. 7, 1999.**

5. "Many scientists believe that comets are leftovers from the formation of the sun." Is this sentence a fact or an opinion? Explain.

Mosque Architecture

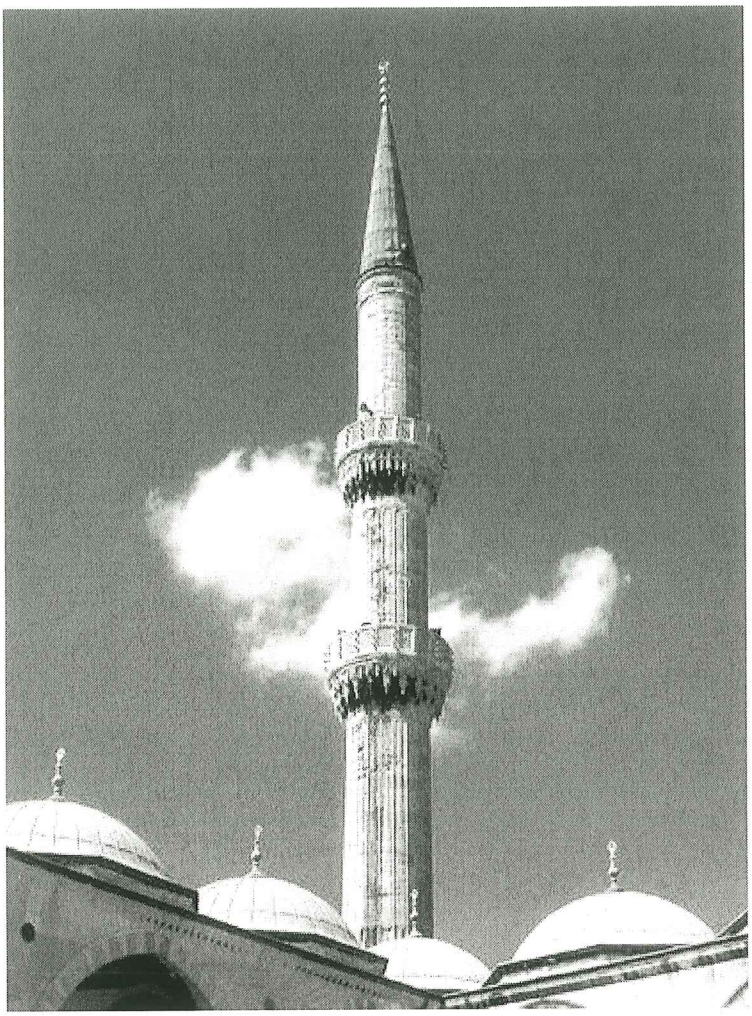
by ReadWorks



photograph of a mosque

A mosque is the place where Muslims, people who practice the religion of Islam, go to worship. Like the Christian church or the Jewish synagogue, the Islamic mosque is the building that serves as the public gathering place where worshipers can come together and pray. It is estimated that there are about 2 billion Muslims in the world, so there are many mosques around the world as well.

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photograph of a minaret

Mosques generally share these four features: the minaret, the qubba, the sahn, and the mihrab. The minaret is a tower structure from which a person cries out the call to prayer. A call to prayer occurs five times a day, and it is essentially an invitation for Muslims to pray. Because the minarets are so tall, these structures also provide a visual reminder of where the mosque is located and, on a symbolic level, show the presence of Islam in the area.

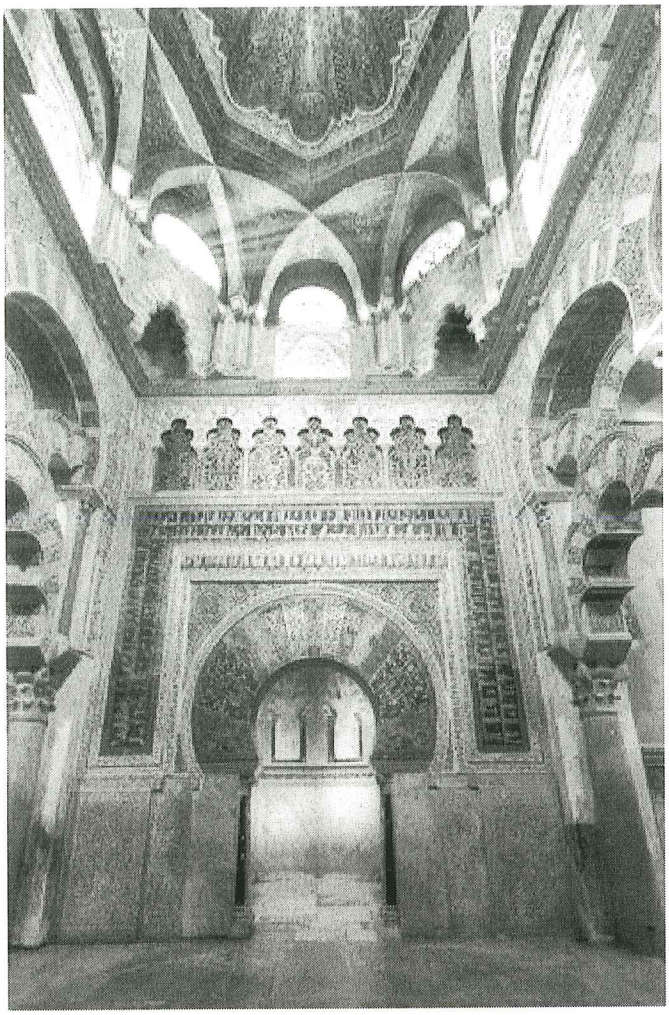
The qubba, which is the Arabic word for dome, is often decorated with many different patterns. While it is not necessary to include the qubba during mosque construction, it is often included as a visual representation of heaven and as a source of inspiration for the worshipers. Depending on the mosque, the number of domes can vary.

The sahn is the courtyard, where fountains can be found. These fountains are important because they allow worshipers to cleanse their bodies before prayer.

Finally, the mihrab is a section of the mosque's wall that points to the direction of Mecca.

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Mecca is the city where the founder of Islam, the Prophet Muhammad, was born. It is the most important city in the Islamic religion, and all Muslims must pray in the direction of Mecca. The wall where the mihrab is located is called the qibla wall, and this wall is typically the most decorated area in the mosque.



photograph of a mihrab

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Name: _____ Date: _____

1. What is a mosque?

A. the place where Jews worship

B. the place where Muslims worship

C. the place where Christians worship

D. the place where Buddhists worship

2. What does the text list and describe?

A. different mosques around the world

B. important events in Islamic history

C. features mosques generally share

D. popular teachings of Islam

3. All mosques are not built the same way. Which information from the text best supports this statement?

A. Mecca is the most important city in the Islamic religion.

B. A minaretprovides a visual reminder of where the mosque is located.

C. Depending on the mosque, the number of domes can vary.

D. The sahn is the courtyard, where fountains can be found.

4. Based on the text, what is one thing that is important in the Islamic religion?

A. prayer

B. charity

C. music

D. holidays

5. What is the main idea of this text?

A. Mosques sharethese four features: the minaret, the qubba, the sahn, and the mihrab.

B. Mecca is the city where the founder of Islam, the Prophet Muhammad, was born.

C. The qubba of a mosque is often decorated with many different patterns.

D. Fountains in a mosque are important because they allow worshipers to cleanse their bodies before prayer.

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MCMS NTI Physical Education Documentation Sheet

COMPLETE ONLY IF YOU CURRENTLY HAVE PHYSICAL EDUCATION

NTI Day	Activity	Minutes
Day 21		
Day 22		
Day 23		
Day 24		
Day 25		

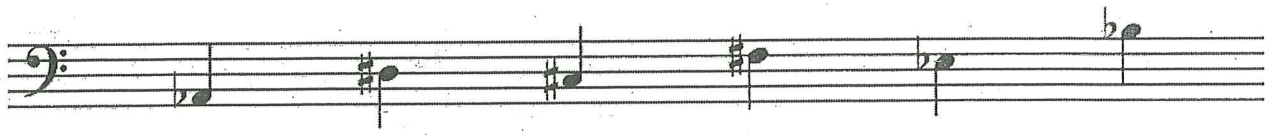
Name: _____

NOTE NAMES

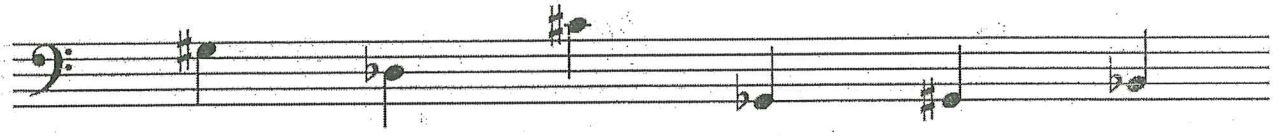
Class: _____

Quiz 27 Sharps and Flats – Bass Clef

DIRECTIONS: Write the correct note name under each note in the bass clef.

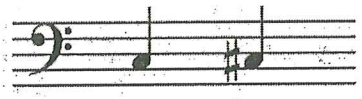
1. 

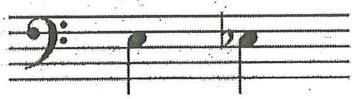
_____ _____ _____ _____ _____ _____

2. 

_____ _____ _____ _____ _____ _____

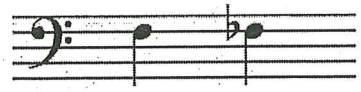
DIRECTIONS: Circle the note which is higher.

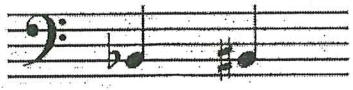
3. 

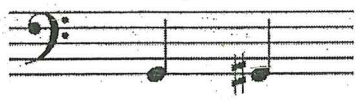
4. 

5. 

DIRECTIONS: Circle the note which is lower.

6. 

7. 

8. 

DIRECTIONS: Using quarter notes and accidentals, draw the following notes in the bass clef. Do not use ledger lines. Note: There may be more than one correct answer.

9. 

B♭ F♯ C♯ D♯ B♯ G♭

DIRECTIONS: Using half notes and accidentals, draw the following notes in the bass clef. Do not use ledger lines. Note: There may be more than one correct answer.

10. 

A♭ E♭ G♯ D♭ F♭ C♭

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