Name_____ Date_____ Class _____

CHAPTER 8

TAKS TEST PREPARATION FOR MATH IN SCIENCE

Math Mini-Test TEKS

Section 1

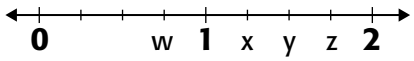
1 There are about 16,000 hair cells inside the cochlea of a person's ear. If 30% of those hair cells are damaged, how many undamaged hair cells remain?

A 4800
B 11,200
C 15,970
D 20,800

2 A sound wave has a frequency of 55 vibrations each second. How many vibrations are there in 1 minute?

F 1.09
G 55
H 1650
J 3300

3 Which point represents $1\frac{3}{4}$ on the number line?



A W
B X
C Y
D Z

4 The Dominguez family went to the zoo. They bought 2 adult tickets at $10.50 each, 3 children's tickets at $8.75 each, 5 passes for the monorail at $1.50 each, and paid a $5 parking fee. What was the total cost of their trip to the zoo?

F $38.75
G $54.75
H $59.75
J $79.75

5 Sandra found that, on average, 2 out of every 10 people in her school like to sing. If there are 35 students in her class, which is the best prediction of the number of students in her class who like to sing?

A 2
B 7
C 27
D 175

6 If $\frac{1}{2}d + 6 = 18$, what is the value of d?

F 11.5
G 15
H 24
J 48

STOP

Name_____ Date_____ Class _____

CHAPTER 8 TAKS TEST PREPARATION FOR MATH IN SCIENCE

Math Mini-Test TEKS

Section 2

1 If *distance* = *speed* × *time,* and the speed of sound at 20°C is 366 m/s, how long will it take to hear the sound from fireworks that explode 400 m away on a night when the air temperature is about 20°C?

A 1.09 s

B 34 s

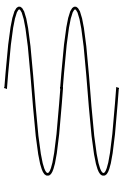
C 18.3 s

D 8000 s

2 Which of the following sound waves produces the loudest sound?

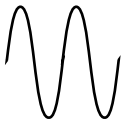
F

G



H

J



3 Mason measures the decibel level of several different sounds. He records 115 dB, 22 dB, 100 dB, 125 dB, and 81 dB. Which answer places his data in order from the softest to the loudest sound?

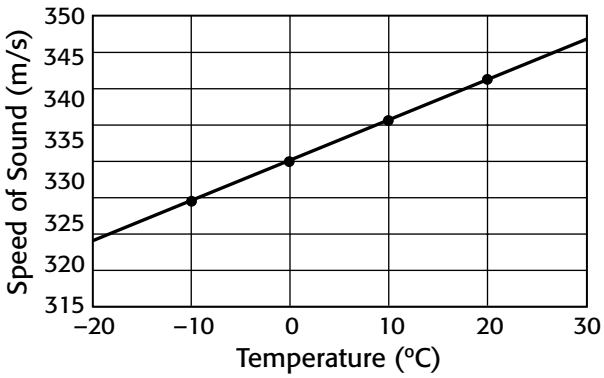
A 115, 22, 100, 125, 81

B 125, 115, 100, 81, 22

C 22, 81, 100, 125, 115

D 22, 81, 100, 115, 125

4 What is a reasonable prediction of the speed of sound at 30°C?



F 326 m/s

G 332 m/s

H 347 m/s

J 365 m/s

5 Scott parks cars at the theatre on weekends. The amount of money he earns, x, can be found using the expression $x = 4.50h + t$, where h is the number of hours he works and t is the amount of his tips in dollars. If he worked 8 hours last weekend and earned $48.25, how much did he earn in tips?

A $6.03

B $8.94

C $12.25

D $43.75

STOP

Name_____ Date_____ Class _____

CHAPTER 8

TAKS TEST PREPARATION FOR MATH IN SCIENCE

Math Mini-Test TEKS

Section 3

1 A research ship sends sound waves toward the sunken treasure at the bottom of the ocean. Sound waves travel through salt water at an average speed of 1531 m/s. If the first signal takes 0.65 s to return to the ship, which answer is closest to the depth of the sunken treasure?

A 4.2×10^{-4} m

B 500 m

C 1000 m

D 2355 m

2 Scientists are working on a project in which they are using sonar to map the ocean floor in a particular location. At present, they can measure an area that is 50 m by 60 m before having to stop to analyze their results. If they could increase the area to 70 m by 90 m, how much more of the ocean floor could the scientist measure?

F 3000 m^2

G 3300 m^2

H 6300 m^2

J 9300 m^2

3 The ultrasound probe used to form a picture of an unborn baby produces sound waves with a frequency of about 2 million Hz. Which answer is another way to express this number?

A 2×10^3 Hz

B 2×10^4 Hz

C 2×10^5 Hz

D 2×10^6 Hz

4 Amber reads 3 pages in 15 minutes. If she continues at this same rate, which proportion could be used to find p, the total number of pages Amber will read in 1 hour?

F $\frac{3}{15} = \frac{p}{60}$

G $\frac{15}{3} = \frac{p}{60}$

H $\frac{p}{3} = \frac{15}{60}$

J $\frac{3}{60} = \frac{15}{p}$

STOP

Name_____ Date_____ Class _____

CHAPTER 8 TAKS TEST PREPARATION FOR MATH IN SCIENCE

Math Mini-Test TEKS

Section 4

1 The Sydney Opera House in Sydney, Australia is one of the most beautiful concert halls in the world. The building is located on a site with an area of 2.2 hectares. The building covers 1.8 hectares. What percent of the site is covered by the building?

A 1.22
B 40
C 81.8
D 100

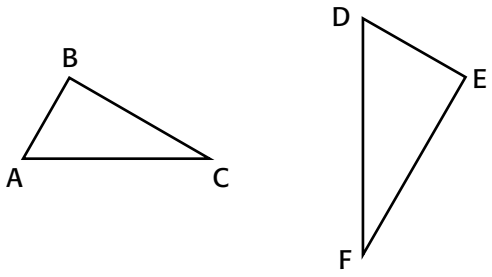
2 The bandleader arranged the band into 10 rows. The first 3 rows contain 8 musicians each, the next 3 rows contain 9 musicians each, and the remaining rows contain 10 musicians each. How many musicians are in the band?

F 27
G 37
H 81
J 91

3 The French horn contains a 2 m long column of air. Which answer is equivalent to this length?

A 20 cm
B 200 mm
C 2000 cm
D 2000 mm

4 If the triangles below are similar, which length completes the proportion $\frac{AB}{DE} = \frac{BC}{?}$?



F AC
G DE
H EF
J DF

5 Kristen answered 3 out of 5 questions correctly. Which expression could be used to find the percentage of questions Kristen answered correctly?

A $\frac{(3 + 5)(100)}{5}$

B $\frac{(5 - 3)(100)}{5}$

C $\frac{(3)(5)}{100}$

D $\frac{(3)(100)}{5}$

STOP

Name_____ Date_____ Class _____

CHAPTER 8

TAKS TEST PREPARATION FOR READING IN SCIENCE

Reading Mini-Test TEKS

Section 1

Read the passage. Then read each question that follows the passage. Decide which is the best answer to each question.

One of the most common types of hearing loss is called tinnitus. Tinnitus can be caused by long-term exposure to loud sounds. Loud sounds can cause damage to the hair cells and nerve endings in the cochlea. Damage to the cochlea or any part of the inner ear often leads to permanent hearing loss. People who have tinnitus often say they hear a ringing in their ears. They also have trouble understanding other people and hearing the difference between words that sound alike. Tinnitus can affect people of any age. Fortunately, tinnitus can be prevented.

1 What causes tinnitus?

- **A** A ringing in the ears
- **B** A difficulty understanding other people
- **C** Damage to hair cells and nerve endings in the cochlea
- **D** Brief exposure to loud sounds

2 Information in the passage suggests that tinnitus could be prevented by

- **F** having regular check-ups at the doctor.
- **G** treating the cochlea after exposure to loud sounds.
- **H** avoiding exposure to loud sounds.
- **J** using ear drops.

3 What is the main idea of the passage?

- **A** Tinnitus can affect both children and adults.
- **B** People with tinnitus often hear a ringing in their ears.
- **C** Loud sounds can damage nerve endings in the cochlea.
- **D** Tinnitus is a common type of hearing loss caused by long-term exposure to loud sounds.

4 In this passage, the word fortunately means

- **F** sadly.
- **G** luckily.
- **H** dramatically.
- **J** urgently.

STOP

Name_____ Date_____ Class _____

CHAPTER 8 TAKS TEST PREPARATION FOR READING IN SCIENCE

Reading Mini-Test TEKS

Section 2

Read the passage. Then read each question that follows the passage. Decide which is the best answer to each question.

Some people use dog whistles to call their dog. A dog whistle seems silent because the frequency of the sound wave cannot be heard by humans. But a dog hears a very high pitch from the whistle and comes running! The average human can hear sounds that have frequencies between 20 Hz and 20,000 Hz. Sounds with frequencies that are lower than 20 Hz are described as infrasonic. Sounds with frequencies that are higher than 20,000 Hz are described as ultrasonic. The range of hearing is different from person to person. For example, young children can often hear sounds with frequencies above the average range.

1 According to the passage above, dog whistles use frequencies
- **A** below 20 Hz.
- **B** between 20 Hz and 20,000 Hz.
- **C** at exactly 20,000 Hz.
- **D** above 20,000 Hz.

2 If the root word *sonic* means "sound," the prefix *ultra-* probably means
- **F** beyond.
- **G** below.
- **H** hearing.
- **J** wave.

3 Which frequency is an example of an infrasonic sound?
- **A** 10 Hz
- **B** 100 Hz
- **C** 2000 Hz
- **D** 25,000 Hz

4 The author's main purpose in writing this passage was probably to
- **F** define the terms ultrasonic and infrasonic.
- **G** describe the ways in which humans and dogs are different.
- **H** explain human hearing ability.
- **J** explain animal behavior.

STOP

Name_____ Date_____ Class _____

CHAPTER 8

TAKS TEST PREPARATION FOR READING IN SCIENCE

Reading Mini-Test TEKS

Section 3

Read the passage. Then read each question that follows the passage. Decide which is the best answer to each question.

Beluga whales use echoes to find food. The process of using reflected sound waves to find objects is called echolocation. Other animals—such as dolphins, bats, and some species of birds—also use echolocation to hunt food and to detect objects in their paths.

People use echoes to find things underwater and underground by using sonar (sound navigation and ranging). Sonar is a type of electronic echolocation. Ultrasonic waves are used because their short wavelengths provide more details about the objects they reflect off of. Sonar can also help navigators on ships detect icebergs, and it can help oceanographers map the ocean floor.

1 What is the best summary of the passage?

A Sonar is a form of electronic echolocation.

B Whales, dolphins, bats, birds, and people can use reflected sound waves to navigate and to locate objects and food.

C Sonar uses ultrasonic waves with short wavelengths because they provide more details about the objects they reflect off of.

D Oceanographers use sonar to map the ocean floor.

2 The purpose of this passage is to

F describe some uses of reflected sound waves.

G entertain the reader with stories about animals.

H persuade the reader to support whale conservation efforts.

J explain how to navigate a ship.

3 Based on its use in the passage above, the word detect probably means

A to think about.

B to fly over.

C to go around.

D to discover the presence of.

4 How is sonar like animal echolocation?

F They are both electronic.

G They both use reflected sound waves to locate objects.

H They are both used by ship navigators.

J They both help dolphins and bats hunt food.

STOP

Name_____ Date_____ Class _____

CHAPTER 8 TAKS TEST PREPARATION FOR READING IN SCIENCE

Reading Mini-Test TEKS

Section 4

Read the passage. Then read each question that follows the passage. Decide which is the best answer to each question.

The amount of noise around you can become so great that it is not only bothersome but also can cause health problems. When noise reaches a level that causes pain or that damages the body, it is considered noise pollution.

Noise pollution can damage the inner ear and cause permanent hearing loss. Noise pollution can also contribute to sleeplessness, high blood pressure, and stress. Because of these health concerns, the federal government has set noise exposure limits for people who work in areas with loud noises. Noise pollution makes the environment less livable for both humans and wildlife.

1 Which is the best summary of the first paragraph?

A Noise can be a form of pollution that causes health problems.

B Some noise can be bothersome.

C Noise pollution can cause permanent hearing loss.

D Noise pollution can cause high blood pressure.

2 Where might the federal government set noise exposure limits?

F A school

G A construction site

H A house

J A grocery store

3 The author probably wrote this passage to

A convince the reader to lobby for new federal guidelines for noise levels.

B explain how noise pollution causes high blood pressure.

C describe how noise pollution is damaging to wildlife.

D inform the reader about the dangers of noise pollution.

4 Each of the following is one possible effect of noise pollution EXCEPT

F hearing loss.

G stress.

H sleeplessness.

J low blood pressure.

STOP

CHAPTER 8 TAKS TEST PREPARATION FOR MATH IN SCIENCE

Answer Key and TAKS Doctor for Mini-Tests

Section 1

Answers	TEKS Correlation	TAKS Objectives
1 B	M 8.3B	2
2 J	M 8.3B	2
3 D	M 8.4	
4 H	M 8.2B	1
5 B	M 8.2C, 8.11B	1, 5
6 H	M 8.5A	2

TAKS Doctor

The following TAKS questions have been diagnosed by the TAKS Doctor. Find out what might be causing your "ailing" answers. The TAKS Doctor will see you now!

Item 1 *asks students to calculate the number of undamaged hair cells if 30% of 16,000 are damaged.*

A **Incorrect.** This answer is equal to the number of hair cells that are damaged ($0.30 \times 16{,}000 = 4800$). However, the question asks how many hair cells remain if 30% are damaged, so the correct answer is the total number of hair cells minus the number of hair cells damaged.

B **Correct.** If 30% of the hair cells are damaged, then 70% remain ($100\% - 30\% = 70\%$). Seventy percent of 16,000 is equal to 11,200. $70\% = \frac{70}{100} = 0.70$; $0.70 \times 16{,}000 = 11{,}200$

C **Incorrect.** This answer is reached by subtracting 30 from the total number of hair cells rather than calculating how many hair cells are damaged if 30% are damaged.

D **Incorrect.** This answer is found by calculating the number of hair cells that are damaged and then adding this amount to the original number of hair cells instead of subtracting.

Item 4 *asks students to calculate the total amount of money a family spent on a trip to the zoo.*

F **Incorrect.** This answer is reached by leaving out the cost of the adult tickets when calculating the total amount of money spent.

G **Incorrect.** This answer is reached by leaving out the parking fee of $5.

H **Correct.** This answer is found by adding the total cost of the adult tickets, the total cost of the children's tickets, the total cost of the monorail passes, and the parking fee. $2(\$10.50) + 3(\$8.75) + 5(\$1.50) + \$5 = \$59.75$

J **Incorrect.** This answer is reached by multiplying the parking fee by 5 and adding that product to the total of the other items.

CHAPTER 8 TAKS TEST PREPARATION FOR MATH IN SCIENCE

Answer Key and TAKS Doctor for Mini-Tests

Section 2

Answers	TEKS Correlation	TAKS Objectives
1 A	M 8.5A	2
2 G	M 8.4	
3 D	M 8.1A	1
4 H	M 8.2C, M 8.5A	1, 2
5 C	M 8.2D	1

The following TAKS questions have been diagnosed by the TAKS Doctor. Find out what might be causing your "ailing" answers. The TAKS Doctor will see you now!

Item 1 *asks students to find the time it will take to hear a sound if it occurs 400 m away when the air temperature is 20°C.*

A **Correct.** This answer is found by first rearranging the distance equation to solve for time ($t = \frac{d}{s}$), then substituting the given values into the equation. $t = \frac{400\text{ m}}{366\text{ m/s}} = 1.09\text{ s}$

B **Incorrect.** This answer is found by subtracting the speed of sound (366 m/s) from the distance (400 m) rather than dividing the distance by the speed of sound.

C **Incorrect.** This answer is found by dividing the speed of sound (366 m/s) by the temperature (20°C) rather than dividing the distance by the speed of sound.

D **Incorrect.** This answer is found by multiplying the distance (400 m) by the temperature (20°C) rather than dividing the distance by the speed of sound.

Item 5 *asks students to find* t *given the equation 4.50*h + t = *$48.25.*

A **Incorrect.** This answer is found by dividing the total amount earned ($48.25) by the number of hours worked (*h*). This is the average amount of money Scott made per hour, not his tips (*t*).

B **Incorrect.** This answer is found by substituting the number of hours worked for *t* rather than *h*.

C **Correct.** This answer is found by substituting 8 into the equation for *h* and solving for *t*. $4.50(8) + t = \$48.25$; $\$36 + t = \$48.25$; $t = \$48.25 - \$36$; $t = \$12.25$

D **Incorrect.** This answer is found by subtracting Scott's hourly wage ($4.50) from his total earnings ($48.25) and does not consider the number of hours he worked.

CHAPTER 8 TAKS TEST PREPARATION FOR MATH IN SCIENCE

Answer Key and TAKS Doctor for Mini-Tests

Section 3

Answers	TEKS Correlation	TAKS Objectives
1 B	M 8.14B	6
2 G	M 8.10A	4
3 D	M 8.1D	1
4 F	M 8.3B	2

TAKS Doctor

The following TAKS questions have been diagnosed by the TAKS Doctor. Find out what might be causing your "ailing" answers. The TAKS Doctor will see you now!

Item 1 *asks students to calculate distance given speed and time.*

A **Incorrect.** This answer is the result of dividing the time by the distance instead of multiplying the time by the distance and then dividing the product by 2.

B **Correct.** This answer is the result of multiplying the speed by the time (1531 m/s × 0.65 s ≈ 995 m). Because this product is the total distance the sound travels from the ship to the treasure and back again, it must be divided by 2 to find the distance from the ship to the treasure. $\frac{995\text{ m}}{2} \approx 500\text{ m}$

C **Incorrect.** This answer is the total distance the signal travels. However, the signal travels from the ship to the sunken treasure and back to the ship again. The question asks only for the distance the signal travels from the ship to the treasure.

D **Incorrect.** This answer is the result of dividing the speed by the time instead of multiplying the two values and dividing the product by 2.

Item 2 *asks students to find the change in surface area given the measurements of two rectangles.*

F **Incorrect.** This answer is the result of finding the original research area without comparing this area to the larger area.

G **Correct.** The original area is 50 m × 60 m = 3000 m^2. The final area is 70 m × 90 m = 6300 m^2. The change in area is the difference between the two areas. 6300 m^2 − 3000 m^2 = 3300 m^2

H **Incorrect.** This answer is the final research area but does not reflect the difference between the original research area and the final research area.

J **Incorrect.** This answer is reached by adding the original research area to the final research area rather than finding the difference between the two areas.

CHAPTER 8 TAKS TEST PREPARATION FOR MATH IN SCIENCE

Answer Key and TAKS Doctor for Mini-Tests

Section 4

Answers	TEKS Correlation	TAKS Objectives
1 C	M 8.3B	2
2 J	M 8.2A	1
3 D	M 8.2B	1
4 H	M 8.3A	2
5 D	M 8.3B	2

The following TAKS questions have been diagnosed by the TAKS Doctor. Find out what might be causing your "ailing" answers. The TAKS Doctor will see you now!

Item 1 *asks students to find what percent of 2.2 is 1.8.*

A **Incorrect.** This answer is the result of dividing the area of the site, 2.2 hectares, by the area of the building, 1.8 hectares.

B **Incorrect.** This answer is the result of subtracting the area of the building, 1.8 hectares, from the area of the site, 2.2 hectares, and then multiplying the result by 100.

C **Correct.** This answer is found by dividing 1.8 hectares by 2.2 hectares and multiplying the quotient by 100. $1.8 \div 2.2 = 0.818$; $0.818 \times 100 = 81.8\%$

D **Incorrect.** This answer is the total percentage to which the other values are being compared. The site occupies 100% of the site and the building occupies 100% of the building area. However, the question asks for a comparison of the area of the building and the area of the site.

Item 2 *asks students to determine the number of musicians in a band given the number of rows formed by the band and the number of musicians in each row.*

F **Incorrect.** This answer is found by misinterpreting the information in the question and solving the problem as if there were only 1 row of each size. $(1 \times 8) + (1 \times 9) + (1 \times 10) = 27$

G **Incorrect.** This answer is found by adding the number of musicians in each row to the numbers of rows. $3 + 8 + 3 + 9 + 4 + 10 = 37$

H **Incorrect.** This answer is found by misinterpreting the information in the question and solving the problem as if there were 3 rows of 8 musicians, 3 rows of 9 musicians, and 3 rows of 10 musicians. $(3 \times 8) + (3 \times 9) + (3 \times 10) = 81$

J **Correct.** This answer is found by multiplying the number of rows by the number of musicians in each row and then adding the products together. Although the number of rows with 10 musicians is not listed, this number can be found by subtracting 6 (the sum of the number of rows with 8 or 9 musicians) from 10 (the total number of rows). The result is 4, which is the number of rows with 10 musicians. $(3 \times 8) + (3 \times 9) + (4 \times 10) = 91$

CHAPTER 8 TAKS TEST PREPARATION FOR READING IN SCIENCE

Answer Key and TAKS Doctor for Mini-Tests

Section 1

Answers	TEKS Correlation	TAKS Objectives
1 C	R 8.10E	3
2 H	R 8.10H	4
3 D	R 8.10F	1
4 G	R 8.6A	

TAKS Doctor

The following TAKS questions have been diagnosed by the TAKS Doctor. Find out what might be causing your "ailing" answers. The TAKS Doctor will see you now!

Item 1 *asks students to identify the cause of tinnitus.*

A **Incorrect.** As described in sentence 5, this is an effect of tinnitus, not its cause.

B **Incorrect.** As described in sentence 6, this is an effect of tinnitus, not its cause.

C **Correct.** As seen in sentences 2–3, tinnitus is caused by loud sounds that damage the hair cells and nerve endings in the cochlea.

D **Incorrect.** As described in sentence 2, tinnitus is caused by long-term exposure to loud sounds, not brief exposure.

Item 4 *asks students to use context to determine the meaning of the word* fortunately.

F **Incorrect.** The fact that tinnitus can be prevented is not sad, so this answer does not make sense in context.

G **Correct.** It is lucky that tinnitus can be prevented, so this answer makes sense in context.

H **Incorrect.** The fact that tinnitus can be prevented is not dramatic, so this answer does not make sense in context.

J **Incorrect.** The fact that tinnitus can be prevented is not urgent, so this answer does not make sense in context.

CHAPTER 8

TAKS TEST PREPARATION FOR READING IN SCIENCE

Answer Key and TAKS Doctor for Mini-Tests

Section 2

Answers	TEKS Correlation	TAKS Objectives
1 D	R 8.10H	4
2 F	R 8.9D	1
3 A	R 8.10K	
4 H	R 8.12A	3

The following TAKS questions have been diagnosed by the TAKS Doctor. Find out what might be causing your "ailing" answers. The TAKS Doctor will see you now!

Item 1 *asks students to draw a conclusion about the frequencies of dog whistles.*

A **Incorrect.** The second sentence states that the dog whistle is too high to be heard by humans, and the fourth sentence states that the average human can hear sounds between 20 and 20,000 Hz. Thus, a dog whistle must have a frequency greater than 20,000 Hz, so it cannot be less than 20 Hz.

B **Incorrect.** Humans generally hear sounds with frequencies between 20 Hz and 20,000 Hz, but humans cannot hear dog whistles, so the frequency of a dog whistle cannot be in this range.

C **Incorrect.** Some humans can hear a frequency of 20,000 Hz, and humans cannot hear dog whistles, so a dog whistle cannot have a frequency equal to 20,000 Hz.

D **Correct.** The passage states that dog whistles generally have a frequency higher than humans can hear, so a dog whistle must have a frequency greater than 20,000 Hz.

Item 2 *asks students to deduce the meaning of the prefix* ultra- *by applying knowledge of the meaning of the root word* sonic.

F **Correct.** As seen in sentences 4 and 6, ultrasonic sounds are higher than 20,000 Hz, the upper limit for the average human ear. Thus, sounds above 20,000 Hz can be described as "beyond sound."

G **Incorrect.** Sounds above 20,000 Hz could not be described as "below sound." This would refer to sounds below 20 Hz, which is the lowest frequency humans can hear.

H **Incorrect.** Sounds beyond the range of human hearing (20 to 20,000 Hz) are called ultrasonic or infrasonic. Sounds above 20,000 Hz could not be described as "hearing sound."

J **Incorrect.** All sounds are created by waves, so no particular sounds are described as "wave sounds."

Answer Key and TAKS Doctor for Mini-Tests

Section 3

Answers	TEKS Correlation	TAKS Objectives
1 B	R 8.10G	1
2 F	R 8.12A	3
3 D	R 8.6A	
4 G	R 8.10K	

TAKS Doctor

The following TAKS questions have been diagnosed by the TAKS Doctor. Find out what might be causing your "ailing" answers. The TAKS Doctor will see you now!

Item 2 *asks students to determine the purpose of the text.*

F **Correct.** The passage describes ways that humans and animals use reflected sound waves.

G **Incorrect.** The passage only discusses animals in the context of echolocation, and does not include any stories.

H **Incorrect.** The reference to beluga whales in the first sentence does not refer to whale conservation efforts. The passage only discusses beluga whales in the context of echolocation.

J **Incorrect.** The passage states that sonar is used in ship navigation, but does not explain how to navigate a ship.

Item 4 *asks students to interpret an analogy between echolocation and sonar.*

F **Incorrect.** This answer is only true of sonar, as seen in the second sentence of the second paragraph. As seen in the first paragraph, echolocation is a natural capability of certain animals.

G **Correct.** The first and second paragraphs describe ways that echolocation and sonar, respectively, use reflected sound waves to locate objects.

H **Incorrect.** This answer is only true of sonar, as seen in the last sentence of the passage.

J **Incorrect.** This answer is only true of echolocation, as seen in the last sentence of the first paragraph.

Answer Key and TAKS Doctor for Mini-Tests

Section 4

Answers	TEKS Correlation	TAKS Objectives
1 A	R 8.10G	1
2 G	R 8.10K	
3 D	R 8.12A	3
4 J	R 8.10F	1

The following TAKS questions have been diagnosed by the TAKS Doctor. Find out what might be causing your "ailing" answers. The TAKS Doctor will see you now!

Item 1 *asks students to identify the best summary of a paragraph.*

A **Correct.** This summary contains the two main ideas of the first paragraph: noise can cause health problems, and when noise does cause health problems, it is considered to be noise pollution.

B **Incorrect.** This statement supports a main idea that noise can be so bothersome that it can cause health problems.

C **Incorrect.** This is a detail in the second paragraph, not a summary of the first paragraph.

D **Incorrect.** This is a detail in the second paragraph, not a summary of the first paragraph.

Item 2 *asks students to use the information in the passage to form a reasonable conclusion.*

F **Incorrect.** According to the fourth sentence of the second paragraph, the federal government sets noise exposure limits for people who work in areas with loud noises. Although schools can be somewhat noisy, the noise generally is not potentially damaging, and therefore not sufficient to warrant a noise exposure limit.

G **Correct.** Noise exposure limits are used in places where the amount and loudness of noise is potentially harmful. A construction site—where people often use very loud machinery—is a likely place for these limits to be imposed.

H **Incorrect.** Because houses are relatively quiet and noise exposure limits are designed to prevent damaging noise pollution, a house is not a likely place for a noise exposure limit to be applied.

J **Incorrect.** Grocery stores can be very noisy, but not noisy enough to cause health concerns for the people who visit them. As is stated in the passage, federal noise limitations are set to protect those who work in areas with loud noises.