

Health: The Basics, 11e, (Donatelle)
Chapter 3a Focus On: Improving Your Sleep

1) The results from an American College Health Association study indicate that most college students

- A) get enough sleep to feel well-rested at least five days a week.
- B) feel tired or sleepy three or more days a week.
- C) sleep more hours per night than students of their parents' generation.
- D) sleep an average of only three hours per night.

Answer: B

Diff: 1 Page Ref: 123

Skill: Understanding

Section: Sleepless in America

Learning Outcome: 3a.1

2) Which of the following chiefly accounts for younger Americans' lack of sleep?

- A) Electronic devices
- B) Failing grades
- C) Eating spicy food
- D) Exercising at night

Answer: A

Diff: 1 Page Ref: 123

Skill: Understanding

Section: Sleepless in America

Learning Outcome: 3a.1

3) What percentage of the world's population lacks adequate sleep?

- A) About 25 percent
- B) About 35 percent
- C) About 45 percent
- D) About 55 percent

Answer: C

Diff: 2 Page Ref: 123

Skill: Remembering

Section: Sleepless in America

Learning Outcome: 3a.1

4) What is the main cause of inadequate sleep around the world?

- A) Disease
- B) Stress
- C) Work
- D) Recreation

Answer: B

Diff: 2 Page Ref: 123

Skill: Remembering

Section: Sleepless in America

Learning Outcome: 3a.1

5) Which of the following groups of Americans is most likely to suffer from excessive daytime sleepiness?

- A) Those between the ages of 12 and 18
- B) Those between the ages of 18 and 24
- C) Those between the ages of 24 and 40
- D) Those between the ages of 40 and 65

Answer: A

Diff: 2 Page Ref: 123

Skill: Remembering

Section: Sleepless in America

Learning Outcome: 3a.2

6) Using electronic devices before bed may disrupt sleep patterns for all of the following reasons EXCEPT the

- A) artificial light they give off.
- B) sleep-inducing hormone they suppress.
- C) beeping sounds they sometimes produce.
- D) increased alertness they can cause.

Answer: C

Diff: 2 Page Ref: 123-124

Skill: Understanding

Section: Sleepless in America

Learning Outcome: 3a.1

7) According to a recent survey, what percentage of American workers report problems at work as a result of sleep issues?

- A) over 15 percent
- B) over 20 percent
- C) over 25 percent
- D) over 30 percent

Answer: D

Diff: 2 Page Ref: 124

Skill: Remembering

Section: Sleepless in America

Learning Outcome: 3a.2

8) When Marlon gets adequate sleep the night before his intramural basketball games, he has more energy and can run faster and perform better. This can be attributed to

- A) cognitive ability being restored during sleep.
- B) increased body temperature and caloric expenditure during sleep.
- C) increased brain activity during sleep.
- D) conservation of body energy during sleep.

Answer: D

Diff: 3 Page Ref: 124

Skill: Applying

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

9) Adequate sleep may enhance intellectual health in all the following ways EXCEPT by

- A) clearing the brain of daily minutia.
- B) synthesizing learning.
- C) consolidating memories.
- D) expending energy.

Answer: D

Diff: 2 Page Ref: 124

Skill: Understanding

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

10) After working on a class project all week and only sleeping about four hours per night, Courtney is

- A) compromising her immunity.
- B) improving her productivity.
- C) getting an adequate amount of sleep for the needs of her body.
- D) increasing her ability to handle sleep deprivation.

Answer: A

Diff: 2 Page Ref: 124

Skill: Applying

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

11) Sleep-deprived individuals may be at greater risk of overweight and obesity because lack of sleep disrupts the actions of the hormones ghrelin and

- A) melatonin.
- B) leptin.
- C) insulin.
- D) estrogen.

Answer: B

Diff: 2 Page Ref: 125

Skill: Understanding

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

12) Two parts of your brain that are critical to regulating circadian rhythm are the hypothalamus and the

- A) pineal body.
- B) amygdala.
- C) cerebellum.
- D) brain stem.

Answer: A

Diff: 2 Page Ref: 126

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

13) REM sleep is named for which physiological activity that occurs while dreaming?

- A) Raised and elevated melatonin
- B) Rapidly energized metabolism
- C) Rapid eye movements
- D) Restless energized movements

Answer: C

Diff: 1 Page Ref: 126

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

14) In preparation for his exam, Juan plans to stay up all night studying. According to research, this strategy will likely result in

- A) improved memory in general.
- B) reduced cognitive ability.
- C) increased short-term memory only.
- D) no significant effects if it's only one night.

Answer: B

Diff: 2 Page Ref: 125

Skill: Applying

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

15) How does sleep deprivation affect drivers?

- A) Increases hunger
- B) Impairs motor skills
- C) Improves response time
- D) Increases thirst

Answer: B

Diff: 2 Page Ref: 125

Skill: Understanding

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

16) The disruption of which factor results in jet lag?

- A) Blood pressure
- B) Natural light
- C) Circadian rhythm
- D) Blood glucose level

Answer: C

Diff: 1 Page Ref: 126

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

17) The hormone released by the pineal gland that causes drowsiness is

- A) growth hormone.
- B) melatonin.
- C) melanin.
- D) insulin.

Answer: B

Diff: 1 Page Ref: 126

Skill: Remembering

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

18) Which of the following decreases the effect of melatonin?

- A) Alcohol
- B) Tryptophan
- C) Muscle relaxants
- D) Caffeine

Answer: D

Diff: 2 Page Ref: 126

Skill: Analyzing

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

19) During REM sleep

- A) the body moves around a lot.
- B) the brain processes and consolidates information.
- C) body temperature drops.
- D) muscles are contracted.

Answer: B

Diff: 2 Page Ref: 127

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

20) Students who doze off during a lecture are usually in which stage of sleep?

- A) 1
- B) 2
- C) 3
- D) 4

Answer: A

Diff: 1 Page Ref: 126

Skill: Applying

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

21) During non-REM sleep

- A) heart rate increases.
- B) digestive processes come to a halt.
- C) vivid dreams occur.
- D) body temperature and energy use drop.

Answer: D

Diff: 2 Page Ref: 126

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

22) During which stage of sleep does a person disengage from the environment?

- A) 1
- B) 2
- C) 3
- D) 4

Answer: B

Diff: 2 Page Ref: 126

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

23) During stage 4, a sleeping person releases which of the following hormones?

- A) Melatonin
- B) Melanin
- C) Insulin
- D) Growth hormone

Answer: D

Diff: 2 Page Ref: 127

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

24) Stage 3 is called slow-wave sleep because

- A) there is slow eye movement during this stage.
- B) this is the deepest stage of sleep.
- C) the brain generates delta waves.
- D) it is the stage during which dreams occur.

Answer: C

Diff: 2 Page Ref: 126

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

25) According to current research, most adults function best with how many hours of sleep per night?

- A) 7-8
- B) 4-5
- C) 5-6
- D) 9-10

Answer: A

Diff: 1 Page Ref: 127

Skill: Remembering

Section: How Much Sleep Do You Need?

Learning Outcome: 3a.5

26) Due to her job, Jessica sleeps 5 to 6 hours per night on weekends. Which of the following is the BEST strategy for her to resolve her sleep debt?

- A) She can't make up for her lost sleep.
- B) She can sleep 12 hours one night per week and 6 to 7 hours the other nights.
- C) She can readjust her sleep needs by sleeping 5 to 6 hours every night.
- D) She can sleep 9 hours per night Monday through Friday.

Answer: D

Diff: 3 Page Ref: 127

Skill: Applying

Section: How Much Sleep Do You Need?

Learning Outcome: 3a.5

27) Which of the following factors determine a person's sleep needs?

- A) Caffeine intake
- B) Heredity
- C) Gender and health status
- D) Cumulative sleep debt

Answer: C

Diff: 2 Page Ref: 127

Skill: Understanding

Section: How Much Sleep Do You Need?

Learning Outcome: 3a.5

28) Sean becomes very sleepy by late afternoon most days and thinks he should make time to fit in a nap. Before including a daily nap in his schedule, he should consider which of the following to ensure that he actually benefits from it?

- A) The time of day and length of the nap
- B) His need for caffeine in the afternoon
- C) His accumulated sleep debt
- D) His body weight and tendency to snore

Answer: A

Diff: 2 Page Ref: 128

Skill: Applying

Section: How Much Sleep Do You Need?

Learning Outcome: 3a.5

29) All of the following negatively affect the quality of sleep EXCEPT

- A) getting lots of exercise during the day.
- B) drinking alcohol at night.
- C) drinking caffeine at night.
- D) needing to get out of bed to go to the bathroom.

Answer: A

Diff: 2 Page Ref: 128-129

Skill: Understanding

Section: How to Get a Good Night's Sleep

Learning Outcome: 3a.6

30) What role does exposure to sunlight during the day play in improving sleep?

- A) It prevents depression.
- B) It helps a person absorb vitamins.
- C) It helps to regulate the circadian rhythm.
- D) It discourages napping during the day.

Answer: C

Diff: 2 Page Ref: 128

Skill: Understanding

Section: How to Get a Good Night's Sleep

Learning Outcome: 3a.6

31) Which of the following nightly rituals is likely to harm your quality of sleep?

- A) Exercising strenuously
- B) Having a cup of herbal tea
- C) Meditating or praying
- D) Taking a warm bath

Answer: A

Diff: 1 Page Ref: 128

Skill: Understanding

Section: How to Get a Good Night's Sleep

Learning Outcome: 3a.6

32) Vijay often tosses and turns, unable to sleep for an hour after he goes to bed. Which of the following will help change this pattern and allow him to fall asleep faster?

- A) Getting out of bed, exercising vigorously, and taking a warm shower
- B) Staying in bed and checking the clock every 15 minutes
- C) Staying in bed and using his laptop to check out his friends' Facebook updates
- D) Getting out of bed after 20 minutes and doing something relaxing until he feels sleepy

Answer: D

Diff: 2 Page Ref: 129

Skill: Applying

Section: How to Get a Good Night's Sleep

Learning Outcome: 3a.6

33) Sleep disorders can be diagnosed through

- A) a clinical sleep study.
- B) a physical exam and blood tests.
- C) a survey of sleep habits.
- D) an evaluation of all daily activities.

Answer: A

Diff: 1 Page Ref: 130

Skill: Understanding

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

34) The most common sleep disorders are

- A) insomnia and urinary incontinence.
- B) insomnia and sleep apnea.
- C) sleep apnea and sleepwalking.
- D) sleepwalking and restless legs syndrome.

Answer: B

Diff: 2 Page Ref: 131

Skill: Remembering

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

35) Maria has difficulty falling asleep occasionally. This condition is known as

- A) sleep apnea.
- B) narcolepsy.
- C) restless legs syndrome.
- D) insomnia.

Answer: D

Diff: 2 Page Ref: 131

Skill: Remembering

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

36) Insomnia is characterized by all of the following EXCEPT

- A) difficulty falling asleep.
- B) waking up frequently during the night.
- C) temporary lapses in breathing while asleep.
- D) early-morning awakening.

Answer: C

Diff: 1 Page Ref: 131

Skill: Understanding

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

37) Justin often binge drinks on the weekends. This behavior puts him at risk for a dangerous sleep disorder in which the brain and the respiratory muscles do not communicate properly. It's known as

- A) central sleep apnea.
- B) obstructive sleep apnea.
- C) narcolepsy.
- D) unconsciousness.

Answer: A

Diff: 2 Page Ref: 131

Skill: Applying

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

38) Obstructive sleep apnea (OSA) commonly results in

- A) reduced snoring.
- B) frequent night waking.
- C) deep breathing.
- D) restful sleep.

Answer: B

Diff: 1 Page Ref: 132

Skill: Understanding

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

39) Zack was diagnosed with obstructive sleep apnea (OSA). His doctor may include diet and exercise as part of his treatment regimen because

- A) greater physical endurance will help in fighting his condition.
- B) losing weight will decrease his risk of developing central sleep apnea.
- C) losing weight may cure his OSA completely.
- D) he will have more energy during the day to combat his usual sleepiness.

Answer: C

Diff: 3 Page Ref: 132

Skill: Applying

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

40) Obstructive sleep apnea increases a person's risk for all of the following EXCEPT

- A) high blood pressure.
- B) stroke.
- C) irregular heartbeats.
- D) asthma.

Answer: D

Diff: 1 Page Ref: 132

Skill: Understanding

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

41) The sleep disorder in which a person experiences unpleasant sensations in the legs and an uncontrollable urge to move to relieve the sensations is

- A) central sleep apnea.
- B) restless legs syndrome.
- C) sleepwalking.
- D) narcolepsy.

Answer: B

Diff: 1 Page Ref: 132

Skill: Remembering

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

42) Sleepwalking typically occurs during

- A) NREM stage 4.
- B) NREM stage 3.
- C) NREM stage 2.
- D) NREM stage 1.

Answer: A

Diff: 2 Page Ref: 126-127

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

43) The underlying cause of narcolepsy appears to be

- A) viral.
- B) genetic.
- C) bacterial.
- D) environmental.

Answer: B

Diff: 2 Page Ref: 132

Skill: Remembering

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

44) Ana has been diagnosed with insomnia. If her doctor prescribes a medication to treat her condition, it will most likely be some type of

- A) sedative.
- B) narcotic.
- C) antidepressant.
- D) stimulant.

Answer: A

Diff: 2 Page Ref: 131

Skill: Applying

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

45) Gene occasionally has difficulty falling asleep but has never been diagnosed with a sleep disorder. Which strategy can he use to help him fall asleep faster?

- A) Working on the computer later in the evening to keep his mind occupied
- B) Eating his largest meal within two hours of bedtime so he won't be hungry
- C) Practicing deep breathing or meditation before bedtime
- D) Drinking a lot of fluids in the evening to stay hydrated

Answer: C

Diff: 2 Page Ref: 129

Skill: Applying

Section: How to Get a Good Night's Sleep

Learning Outcome: 3a.6

46) When you feel groggy and disoriented after a long nap, you are experiencing

- A) sleep apnea.
- B) narcolepsy.
- C) insomnia.
- D) sleep inertia.

Answer: D

Diff: 1 Page Ref: 128

Skill: Applying

Section: How Much Sleep Do You Need?

Learning Outcome: 3a.5

47) The condition that causes people to fall asleep involuntarily during the day is

- A) sleep apnea.
- B) narcolepsy.
- C) insomnia.
- D) sleep inertia.

Answer: B

Diff: 1 Page Ref: 132

Skill: Remembering

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

48) The sleep disorder in which breathing is interrupted many times during sleep is

- A) sleep apnea.
- B) narcolepsy.
- C) insomnia.
- D) sleep inertia.

Answer: A

Diff: 1 Page Ref: 131

Skill: Remembering

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

49) A person who has difficulty falling asleep and wakes up frequently is suffering from

- A) non-REM sleep.
- B) sleep debt.
- C) narcolepsy.
- D) insomnia.

Answer: D

Diff: 1 Page Ref: 131

Skill: Remembering

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

50) A person's 24-hour cycle of sleeping, waking, and performing daily activities is his or her

- A) daily cycle.
- B) seasonal rhythm.
- C) circadian rhythm.
- D) habitual behavior.

Answer: C

Diff: 1 Page Ref: 126

Skill: Remembering

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

51) The restful, restorative period of sleep is

- A) non-REM sleep.
- B) REM sleep.
- C) alternating-wave sleep.
- D) rapid-wave sleep.

Answer: A

Diff: 1 Page Ref: 126

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

52) The energizing period of sleep during which dreams occur is

- A) non-REM sleep.
- B) REM sleep.
- C) alternating-wave sleep.
- D) rapid-wave sleep.

Answer: B

Diff: 1 Page Ref: 127

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

53) The difference between hours of sleep needed and actual hours slept is

- A) sleep ratio.
- B) sleep debt.
- C) sleep pattern.
- D) sleep inertia.

Answer: B

Diff: 1 Page Ref: 127

Skill: Remembering

Section: How Much Sleep Do You Need?

Learning Outcome: 3a.5

54) Some researchers believe that the link between obesity and sleep is related to

- A) blood glucose levels.
- B) family history.
- C) seasonal affective disorder.
- D) hormonal disturbances.

Answer: D

Diff: 1 Page Ref: 125

Skill: Understanding

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

55) The portion of the brain considered to be the "master mind" that only rests during sleep is the

- A) cerebral cortex.
- B) cerebrum.
- C) brain stem.
- D) midbrain.

Answer: A

Diff: 2 Page Ref: 125

Skill: Remembering

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

56) During a sleep study, a person spends the night in a sleep lab, and his or her body functions are monitored by

- A) full-time sleep specialists.
- B) nurses on the night shift.
- C) sensors and electrodes.
- D) imaging equipment.

Answer: C

Diff: 2 Page Ref: 130

Skill: Understanding

Section: What If You Still Can't Sleep?

Learning Outcome: 3a.7

57) Caffeine effectively counteracts the negative effects of sleep deprivation.

Answer: FALSE

Diff: 1 Page Ref: 126

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

58) People aged 13 to 29 in the United States are more sleep-deprived than any other age group.

Answer: TRUE

Diff: 1 Page Ref: 123

Skill: Remembering

Section: Sleepless in America

Learning Outcome: 3a.2

59) Alcohol improves sleep because it enhances relaxation.

Answer: FALSE

Diff: 1 Page Ref: 129

Skill: Understanding

Section: How to Get a Good Night's Sleep

Learning Outcome: 3a.6

60) Sleep helps the body to conserve energy.

Answer: TRUE

Diff: 1 Page Ref: 124

Skill: Remembering

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

61) Getting enough sleep may reduce a person's susceptibility to colds.

Answer: TRUE

Diff: 1 Page Ref: 124

Skill: Understanding

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

62) Adequate sleep lowers a person's metabolic rate.

Answer: FALSE

Diff: 1 Page Ref: 125

Skill: Understanding

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

63) The top cause of sleep problems worldwide is hunger.

Answer: FALSE

Diff: 2 Page Ref: 123

Skill: Remembering

Section: Sleepless in America

Learning Outcome: 3a.1

64) Sleep deficiencies have been linked to increased alcohol abuse.

Answer: TRUE

Diff: 2 Page Ref: 123

Skill: Understanding

Section: Sleepless in America

Learning Outcome: 3a.1

65) Lack of sleep can have a detrimental effect on academic performance.

Answer: TRUE

Diff: 1 Page Ref: 123

Skill: Understanding

Section: Sleepless in America

Learning Outcome: 3a.1

66) A sleep-deprived driver is as impaired as an intoxicated driver.

Answer: TRUE

Diff: 1 Page Ref: 125

Skill: Understanding

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

67) Jet lag occurs because travelers take frequent naps while flying.

Answer: FALSE

Diff: 2 Page Ref: 126

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

68) The majority of nighttime sleep is spent in REM sleep.

Answer: FALSE

Diff: 2 Page Ref: 126

Skill: Remembering

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

69) REM sleep restores the body.

Answer: FALSE

Diff: 2 Page Ref: 126

Skill: Remembering

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

70) During NREM sleep, body temperature and energy use drop.

Answer: TRUE

Diff: 2 Page Ref: 126

Skill: Remembering

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

71) The shortest stage of sleep is stage 2.

Answer: FALSE

Diff: 1 Page Ref: 126

Skill: Remembering

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

72) Some scientists believe that REM sleep enhances memorization and learning.

Answer: TRUE

Diff: 2 Page Ref: 127

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4

73) Most adults need only 5 to 6 hours of sleep per night, provided it's high-quality sleep.

Answer: FALSE

Diff: 1 Page Ref: 127

Skill: Understanding

Section: How Much Sleep Do You Need?

Learning Outcome: 3a.5

74) Jane stayed up all night taking care of her sick child. She will need to sleep more than average the next few nights to make up for the hours of lost sleep.

Answer: TRUE

Diff: 2 Page Ref: 127

Skill: Applying

Section: How Much Sleep Do You Need?

Learning Outcome: 3a.5

75) Naps are most effective for improving alertness if they are longer than 30 minutes.

Answer: FALSE

Diff: 1 Page Ref: 128

Skill: Understanding

Section: How Much Sleep Do You Need?

Learning Outcome: 3a.5

76) Ty works two jobs and attends college part-time. He averages 5 hours of sleep per night most nights of the week. What are the health risks of his sleep deprivation?

Answer: Sleep deficiency affects the immune system, leaving a person more at risk for viruses and other ailments, along with an overall disruption of immune functioning. It increases the risk of high blood pressure and cardiovascular disease. It also slows down the metabolism and raises the risk of overweight and obesity, and possibly the development of type 2 diabetes.

Diff: 2 Page Ref: 124-125

Skill: Understanding

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

77) Tracy pulls "all-nighters" during finals week. Explain why this could negatively impact her grades.

Answer: Restricting sleep can cause neurological problems. She may have lapses of attention, slowed or poor memory, and reduced cognitive ability.

Diff: 2 Page Ref: 125

Skill: Understanding

Section: Why Do You Need to Sleep?

Learning Outcome: 3a.3

78) Explain the four stages of NREM sleep.

Answer: Stage 1 is the lightest stage of sleep. It lasts only a few minutes. Stage 2 lasts 5-15 minutes and is deeper than stage 1. Stage 3 is called slow-wave sleep. Blood pressure, heart rate, and respiration slow. Stage 4 is the deepest stage. Growth hormone is released during this stage.

Diff: 2 Page Ref: 126-127

Skill: Understanding

Section: What Goes on When You Sleep?

Learning Outcome: 3a.4