PLEASE DO NOT BOOKMARK ANY ANYTIMECE WEBPAGES!
Our system will remember the last page you viewed when logging out and back in but please DO NOT exit out when taking a test. Your place will NOT be saved.

How to take this course.
1. Download and Print the test questions.
2. Login to your account with your ID and password.
3. Viewing your status page, scroll down and click on “Click here to start this course”.
4. Begin viewing the web pages. Refer to your printed test to find the correct answers. The questions track the web pages.
5. As you find the answers, circle them on your printed copy.
6. At the end of each section, you’ll enter the quiz which is the same as your printed test. Refer to your circled answers when actually answering the quiz on the web.
7. Upon passing, you will proceed to the next section. If failed to pass, you will be moved to the beginning of that section for more review.

- Mobile users – Many current mobile devices are compatible with AnytimeCE and will probably work. If not, use a desktop or laptop computer to complete your course.

- WA. Electricians – WA. L&I requires all online test questions and answers to be randomized. Be sure to answer all of the test questions on your printed copy.

Quiz 1 - WA Electricians: Answer all questions - 50% of the following will appear in random order with random answers - as required by WA LNI

1. Electrocution is the _______ leading cause of deaths in the construction industry.
   • 1st
   • 2nd
   • 3rd
   • 4th
   • 5th

2. There are about _______ electrically caused fires per year.
   • 150,000
   • 250,000

3. Which of the following is not caused by electrical accident?
   • A shock occurs when an electrical current passes through your body.
   • You become part of the electrical circuit.
   • Your body is the electrical path for the electrical current.
   • All of the answers provided.
   • None of the answers provided.

4. What is shock?
   • A shock occurs when an electrical current passes through your body.
Electrical Safety

- You become part of the electrical circuit.
- Your body is the electrical path for the electrical current.
- All of the answers provided.
- None of the answers provided.

5. On typical 120 volt conductors, the “hot” wire is colored ________.
   - green
   - gray
   - red
   - black
   - white

6. On typical 120 volt conductors, the “neutral” wire is colored ________.
   - green
   - gray
   - red
   - black
   - white

7. On typical 120 volt conductors, the “ground” wire is colored ________.
   - green
   - gray
   - red
   - black
   - white

8. A transformer on the power pole ________ the voltage to a level that can be used in the structure.
   - steps up
   - steps down
   - isolates
   - neutralizes

9. The voltage between L1 and L2 in the structure is ________.
   - 240
   - 120
   - 0
   - 4800

10. The voltage between L1 and Neutral in the structure is ________.
    - 240
    - 120
    - 0
    - 4800

11. The voltage between L2 and Neutral in the structure is ________.
    - 240
    - 120
    - 0
    - 4800

12. The purpose of a circuit breaker is ________.
    - to protect an individual electrical circuit from excessive amp flow
    - to protect an individual electrical circuit from excessive voltage flow
    - to serve as an ON/OFF switch
    - to serve as an energy saving device

13. What are the number of buss bars in a 240 volt panel box?
    - 2
    - 3
    - 4
    - 5
    - 6

14. The neutral buss bar is electrically connected or bonded with the ________ buss bar.
    - Line 1
    - Line 2
    - ground
    - is not connected to any other buss bar
    - is connected to all the other buss bars

15. The neutral and ground buss bars are electrically the same when connected by a bonding wire.
    - True
    - False

16. The ground wire on an electrical drill is connected to ________.
    - the metal case of the drill
    - the “incoming side of the black or hot wire
    - the “outgoing” side of the white wire
    - the electric motor housed in the drill casing

17. When an electrical appliance is overused and shorts out, ________ may disengage internally and touch the case of the unit.
    - the black wire
    - the white wire
Electrical Safety

- the green wire
- the black and white wires
- the black, white and green wires

18. In a motor burnout, the electrical current is returned to the panel box by traveling down
   - the white wire
   - the black wire
   - the green wire
   - the white or green wires
   - the person holding the drill

19. After returning to the wall receptacle, the current _______ and trips the breaker effectually turning off power.
   - increases
   - decreases
   - stays the same

20. An electrical drill with the "ground" prong removed shorts out to the drill’s case. The electrical ground now is ________.
   - the black wire
   - the white wire
   - the green wire
   - the person holding the drill

21. What can happen to a worker after receiving an electrical shock?
   - They can fall off a ladder and become injured.
   - They can develop nerve damage.
   - They can suffer horrible burns.
   - They can die.
   - All of the answers provided.

Quiz 2 - WA Electricians: Answer all questions - 50% of the following will appear in random order with random answers - as required by WA LNI

1. The number of fatal falls in a year is about ________.
   - 1,000
   - 5,000
   - 10,000
   - 20,000
   - 25,000

2. A 1st degree burn can result in ________.
   - underlying muscle damage

3. A 2nd degree burn can result in ________.
   - underlying muscle damage
   - painful red skin but not permanent damage
   - total skin depth destroyed which requires grafting
   - blisters but the skin will regenerate to normal

4. A 3rd degree burn can result in ________.
   - underlying muscle damage
   - painful red skin but not permanent damage
   - total skin depth destroyed which requires grafting
   - blisters but the skin will regenerate to normal

5. A 4th degree burn can result in ________.
   - underlying muscle damage
   - painful red skin but not permanent damage
   - total skin depth destroyed which requires grafting
   - blisters but the skin will regenerate to normal

6. What are the factors that contribute to the severity of an electrical shock injury?
   - The level of electrical voltage.
   - The amount of electrical current.
   - The length of time the current flows through the body.
   - The path the electricity takes through the body.
   - All of the answers provided.

7. Which voltage level is considered to be safe?
   - 24
   - 120
   - 240
   - 480

8. Electrocution and death can result when the electrical current flows through one’s body and exceeds ________.
Electrical Safety

- 6 mA
- 10 mA
- 16 mA
- 50 mA

9. What mathematical formula is known as the Ohm’s Law?
- Amps = volts x resistance
- Amps = volts divided by resistance
- Amps = resistance divided by ohms
- Amps = resistance x volts

10. If experiencing an electrical shock, the higher the resistances of your body, the ______ of a shock.
- lower – less
- lower – more
- higher – more
- higher – less

11. The 1st step in decreasing the severity of an electrical shock is _______.
- to use protective gloves, clothes and boots
- to keep your hands dry
- to stand on a dry surface

12. The 2nd step in decreasing the severity of an electrical shock is _______.
- to use protective gloves, clothes and boots
- to keep your hands dry
- to stand on a dry surface

13. The 3rd step in decreasing the severity of an electrical shock is _______.
- to use protective gloves, clothes and boots
- to keep your hands dry
- to stand on a dry surface

14. If the current flowing through you is less than _______, you can let go of the “hot” wire.
- 6 mA
- 10 mA
- 16 mA
- 50 mA

15. If one has to test or work on “live” equipment, it is safer to use _______.
- one hand
- both hands

16. The electrical flow (current) to an electrical motor on the black or hot wire is _______.
- greater than
- less than
- equal to
- unknown since it depends on the type of motor

17. GFCI is an abbreviation for _______.
- Ground Fault Circuit Interrupter
- Gross Fatal Current Inducer
- Grounded Flow Cardiac Injury
- Generated Faulty Current Injury

18. The GFCI opens up the electrical flow in the “hot leg” if there is a current imbalance of _______ or more.
- 0.1 mA
- 0.5 mA
- 1.0 mA
- 5.0 mA

19. A GFCI will work only if a ground wire is present.
- True
- False

20. A portable QFCI should be tested _______.
- before each use
- daily
- weekly
- monthly
- yearly

Quiz 3- WA Electricians: Answer all questions - 50% of the following will appear in random order with random answers - as required by WA LNI

1. There are about _______ fires annually.
- 50,000
- 100,000
- 250,000
- 1 million
- 1-1/2 million

2. A fire extinguisher that has a/an _______ label can be used on electrical fires.
- A
- B
- C
3. A fire extinguisher that has a/an _________ label can be used on ordinary combustible fires.
   - A
   - B
   - C

4. A fire extinguisher that has a/an _________ label can be used on flammable liquid fires.
   - A
   - B
   - C

5. The most effective way to eliminate the risk of an electrical shock is to de-energize the equipment.
   - True
   - False

6. A lockout can be placed on _________ to de-energize electrical equipment.
   - a panel box
   - a breaker
   - a disconnect box
   - all of the answers provided

7. Some lockout devices allow up to _________ different padlocks to be used to secure a system.
   - 3
   - 4
   - 6
   - 10

8. Prior to locking out a breaker, check to make sure that the breaker clearly indicates if it is in the open or closed position.
   - True
   - False

9. In the panel box, each breaker should be correctly labeled. The label should be _________.
   - in ink
   - typed
   - written in English
   - written in Spanish
   - legible and durable

10. _________ remove a lock on a lockup other than your own.
    - Never
    - Sometimes you may

11. The best place to keep the key for your lockout is _________.
    - on a peg near the disconnect
    - in the lock
    - with your supervisor
    - in your pocket

12. When a voltage pen is near a live electrical wire or source, _________.
    - the pen tip lights up
    - the pen emits an audible sound
    - both of the answers provided
    - neither of the answers provided

13. Prior to using a voltage pen, it is recommended that one checks the pen using a known electrical source.
    - True
    - False

14. Which of the following is NOT considered good lighting:
    - floor mounted spot lights
    - hand held flash lights
    - overhead lights
    - clamp-on lights

15. A circuit tester was inserted into a receptacle with the above display: This means _________.
    - Open Ground
    - Open Neutral
    - Hot/Ground reversed
    - Hot/Neutral reversed
    - Correct

16. A circuit tester was inserted into a receptacle with the above display: This means _________.
    - Open Ground
    - Open Neutral
    - Hot/Ground reversed
    - Hot/Neutral reversed
    - Correct
17. A circuit tester was inserted into a receptacle with the above display: This means ________.
   - Open Ground
   - Open Neutral
   - Hot/Ground reversed
   - Hot/Neutral reversed
   - Correct

18. A circuit tester was inserted into a receptacle with the above display: This means ________.
   - Open Ground
   - Open Neutral
   - Hot/Ground reversed
   - Hot/Neutral reversed
   - Correct

19. On a receptacle, the white wire should be connected to the ________ terminal.
   - Green Hexagonal terminal screw
   - Nickel or light colored terminal
   - Brass colored terminal

20. On a receptacle, the black wire should be connected to the ________ terminal.
    - Green Hexagonal terminal screw
    - Nickel or light colored terminal
    - Brass colored terminal

21. On a receptacle, the green or bare copper wire should be connected to the ________ terminal.
    - Green hexagonal terminal screw
    - Nickel or light colored terminal
    - Brass colored terminal

2. When repairing an extension cord with wears on the outer coating, ________.
   - Repair with a single wrapping of electrical tape
   - Repair with a double wrapping of electrical tape
   - Repair with a triple wrapping of electrical tape
   - Do not attempt to repair with electrical tape since electrical tape isn’t approved for this application

3. Extension cords can be ________.
   - Fastened in place with staples
   - Hung from nails
   - Suspended by a wire
   - None of these objects should be used on extension cords

4. Outer coverings of extension cords should be marked with ________.
   - SO
   - SJTW
   - Either SO or SJTW
   - Nothing, markings aren’t required

5. An extension cord should have ________ wires, with a minimum size of ________.
   - 2 – 16
   - 3 – 14
   - 2 – 12
   - 3 – 12

6. A wire size of No. 14 will carry ________ at 120 Volts.
   - 10 amps
   - 15 amps
   - 20 amps
   - 25 amps

7. The safest way to remove an extension cord from a receptacle is to ________ and pull.
   - Grasp the plug end
   - Grasp near the end of the cord
   - Grasp anywhere along the cord

8. Using an extension cord that is coiled may result in ________.
   - An electromagnetic force field
   - Excessive voltage drop
   - Over-heating

Quiz 4- WA Electricians: Answer all questions - 50% of the following will appear in random order with random answers - as required by WA LNI

1. Prior to using an extension cord, examine the cord for ________.
   - A missing ground pin
   - A damaged outer jacket
   - Damaged male/female ends
   - All of the answers provided
Electrical Safety

9. A GFCI should always be used ________.
   - in wet areas
   - when electricity is present
   - if using 240 volts
   - on live circuits

10. Grounding with a flexible cord by using a cord and plug should be ________.
    - a temporary application
    - accessible
    - both of the answers provided
    - neither of the answers provided

11. Flexible cords should NOT ________.
    - run through holes in walls, ceilings or floors
    - run through doorways or windows
    - be hidden in ceilings, floors, conduits or other raceways
    - all of the answers provided

Quiz 5 - WA Electricians: Answer all questions - 50% of the following will appear in random order with random answers - as required by WA LNI

1. Power strips are for ________ use only. They should not be used to power ________.
   - temporary – appliances
   - long term – electronic equipment
   - permanent – refrigerators

2. All pull and junction boxes need to be provided with ________.
   - proper covers
   - plastic covers
   - steel covers
   - galvanized covers

3. Conductors entering cutout boxes should be ________.
   - No. 12 or smaller
   - 3 wires
   - colored black
   - protected from abrasion

4. Receptacles should be provided with ________.
   - cover plates
   - labels

5. When working around all electrical equipment, there should be ________.
   - sufficient access around the work space
   - safety barriers in place
   - locked gates
   - key access

6. Coming into contact with power lines can account for ________ of all electrocutions.
   - 10 %
   - 35 %
   - 50 %
   - 75 %

7. Aluminum ladders should ________ be used near electrical or power lines.
   - never
   - occasionally
   - always

8. A double insulated tool has ________.
   - 2 layers of insulation around the internal electrical parts
   - 2 grounding plugs
   - 2 white wires connected to the end of the cord
   - 2 electrical plugs on the end of the cord

9. The double insulated symbol is displayed as what illustration?
   - A double square
   - A double circle
   - Square with circle

• a tripping hazard
• written descriptions
• hinged lids
10. A classified hard hat that will offer the greatest electrical protection is _______.
   - Class E
   - Class G
   - Class C

11. The type of hard hat that will withstand the greatest force is _______.
    - Type I
    - Type II
    - either Type I or II since they have the same rating

12. What is the best method to determine the electrical rating of a hard hat?
    - Look at the packing box.
    - Look at the manufacturer's catalog information.
    - Look at the label inside the hard hat.
    - All hard hats have the same ratings.

13. The best type of paint to use on a hard hat is _______.
    - oil based acrylic
    - water based latex
    - spray paint
    - none

14. Noise levels are measured in _______.
    - decibels
    - ohms
    - volts
    - amps
    - none of the answers provided

15. Normal speech is usually at _______.
    - 120 db
    - 100 db
    - 80 db
    - 65 db

16. The maximum exposure at 100 db without hearing loss is _______.
    - 1 hour
    - 2 hours
    - 3 hours
    - 4 hours
    - 5 hours

17. Ear plugs can reduce noise levels by _______ decibels.
    - 10 to 20
    - 20 to 30
    - 35 to 45
    - 50 to 60

18. Boots and shoes that are electrical shock resistant are marked on the tongue with these letters: _______.
    - ESR
    - PS
    - ES
    - EH
    - SR

Quiz 6 - WA Electricians: Answer all questions - 50% of the following will appear in random order with random answers - as required by WA LNI

1. An arc flash occurs when electrical current travels through the air between two conductors.
   - True
   - False

2. Annually, how many people are admitted to burn centers with severe arc flash burns?
   - 1,000
   - 2,000
   - 3,000
   - 5,000
   - Over 10,000

3. In an arc flash, the air expands rapidly with a resulting pressure that can reach _______.
   - 10 psi
   - 50 psi
   - 100 psi
   - 200 psi

4. An arc flash is rated by the amount of energy that can be produced. The highest rating for an arc flash is categorized as _______.
   - 1
   - 2
   - 3
   - 4
   - Dangerous
5. Arc flash gloves are rated and labeled by color coded tags. The maximum AC/DC used for a Green tagged glove is _______.
   - 1000 / 1500
   - 7500 / 11250
   - 17000 / 25500
   - 26500 / 39750

6. The 1st step in an electrical rescue is _______.
   - to find the breaker or disconnect and turn the power off
   - to find a non-conductive handle or stick to remove the electrical cord/wire from the victim
   - to call 911 and then apply CPR if needed
   - to cover with a blanket to help warm the victim if conscious or continue with CPR if unconscious

7. The 2nd step in an electrical rescue is _______.
   - to find the breaker or disconnect and turn the power off
   - to find a non-conductive handle or stick to remove the electrical cord/wire from the victim
   - to call 911 and then apply CPR if needed
   - to cover with a blanket to help warm the victim if conscious or continue with CPR if unconscious

8. The 3rd step in an electrical rescue is _______.
   - to find the breaker or disconnect and turn the power off
   - to find a non-conductive handle or stick to remove the electrical cord/wire from the victim
   - to call 911 and then apply CPR if needed
   - to cover with a blanket to help warm the victim if conscious or continue with CPR if unconscious

9. The 4th step in an electrical rescue is _______.
   - to find the breaker or disconnect and turn the power off
   - to find a non-conductive handle or stick to remove the electrical cord/wire from the victim