



SEQUENCE 2.

Unit 3: Architecture.

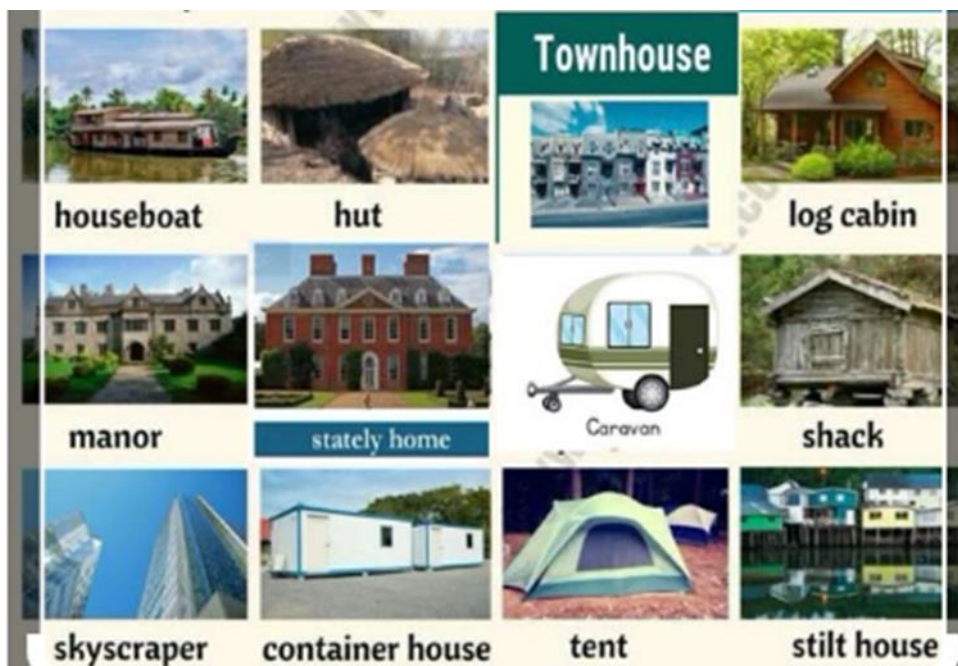
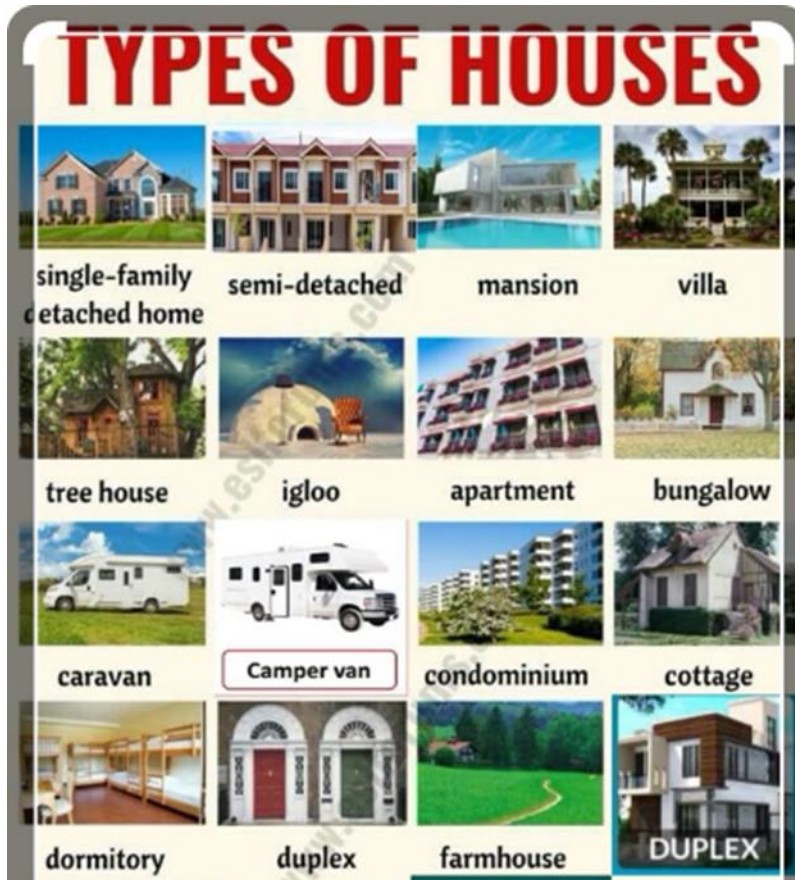
HOUSING.

*Aim / Objetivo: Que los alumnos tengan conocimientos mínimos de arquitectura de modo tal que puedan aplicar sus conocimientos de electricidad dependiendo del tipo de estructura que se presente.

<https://www.spanish.academy/blog/vocabulary-guide-to-architecture-in-spanish/>



*Camper Van. (Last picture)



ARCHITECTURE STYLES.



Art Deco



Deconstructivism



Baroque architecture



Gothic architecture



Ancient architecture



Beaux arts classicism



Italianate



Neoclassical architecture



Romanesque architecture



Expressionist architecture



Renaissance architecture



Baroque



International Style



Parametricism



Bauhaus



Greek Revival



Brutalist architecture



New Classical architectu...



Art Nouveau Architecture



Functionalism



Neo-futurism





Rococo



Aerospace architecture



Cape Cod

A
Ve

-Construction Trades (Oficios en construcción)

architect

brickmason/mason

carpenter

construction/site manager

draftsman.

Electrician.

engineer

painter.

Plumber.

project director.

project manager.

Architecture Verbs.

to build.

to create.

to design.

to draw.

to manage.

to oversee.

to plan.

to take measurements.

Parts of an Architectural Construction.

Beams.

ceiling.

Columns.

Floor.

Foundation.

Lighting.

pillars.

slabs.

Stairs.

Structure.

Walls.

CONSTRUCTION MATERIALS.



wood



stone



steel



sand



metal



gravel



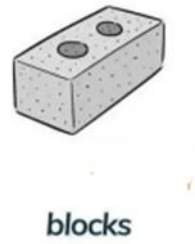
plastic



glass



concrete



Cement - concrete mixer.

Construction Tools and Machines.

Carpenter's square.

Compactor.

Draglines.

Drill.

Hammer.

Level.

Motor grader.

Paver.

Saw.

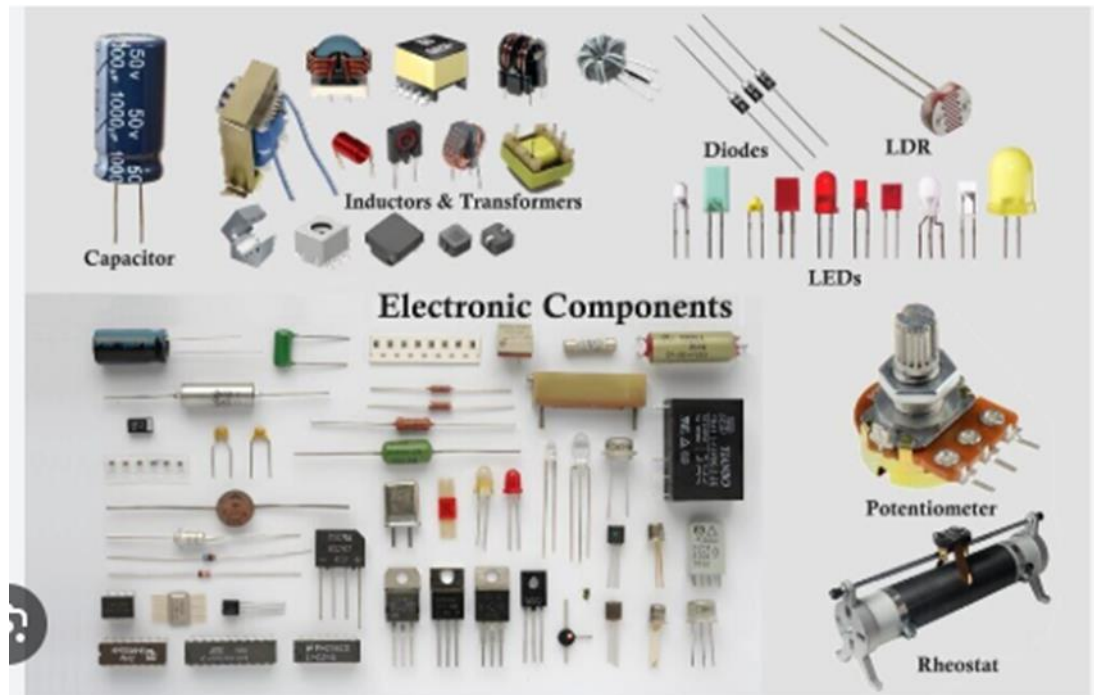
Shovel.

Tape measure.

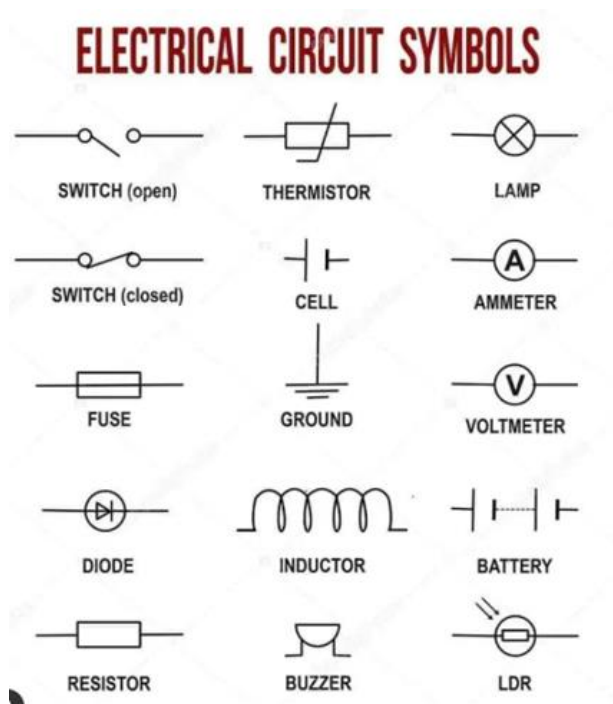
Blueprint.














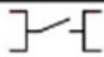




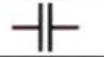
















Unit 4. "An Overview Of Electronics."

Aim / Objetivo: Que los alumnos puedan interiorizarse de los distintos componentes que pueden encontrar en placas de artefactos así como en un tablero operador.



*LDR: Light Dependent Resistor.



Part	Symbol	Picture
330 Ohm Resistor		
1K Ohm Resistor		
10K Ohm Resistor		
22K Ohm Resistor		
10K Rotary Potentiometer		
Light Dependent Resistor (LDR)		
Green LED 5mm		
Red LED 5mm		
Yellow LED 5mm		
Push Button Switch		
10uF Electrolytic Capacitor		
100uF Electrolytic Capacitor		
0.1uF Ceramic Capacitor		
Transistor BC546 NPN		
Diode (1N4007)		
Breadboard Prototype Wires		
Alligator clip wires		
5V Regulator LM7805		
Battery Snap		
3 AA Battery supply 4.5V		
Breadboard 400 Hole		

LISTENING ACTIVITIES
THROUGH
VIDEOS TO WATCH.

VIDEO 1.

<https://www.youtube.com/watch?v=qxWI2MGT6Co>



Who Discovered Electricity? | Greatest Discovery of All Time | Benjamin Franklin Kite Experiment

ACTIVITY.

*Watch the video. Then, write down the subtitles in English and translate them into Spanish.

VIDEO 2.

ACTIVITY.

*Watch the video. Write down the subtitles in English and translate them into Spanish. After that, answer the following questions.

- 1) Where was Michael Faraday born?
- 2) What was his family economical condition in his childhood?
- 3) What happened when he was 13?
- 4) What did a customer offer to him and why?
- 5) What happened after he returns to England in 1815?
- 6) When did Michael Faraday pass away?

<https://www.youtube.com/watch?v=uJlCv-G2ok>



Michael Faraday's Life Story | The Father of Electricity | Greatest Scientist | The Dr. Binocs Show

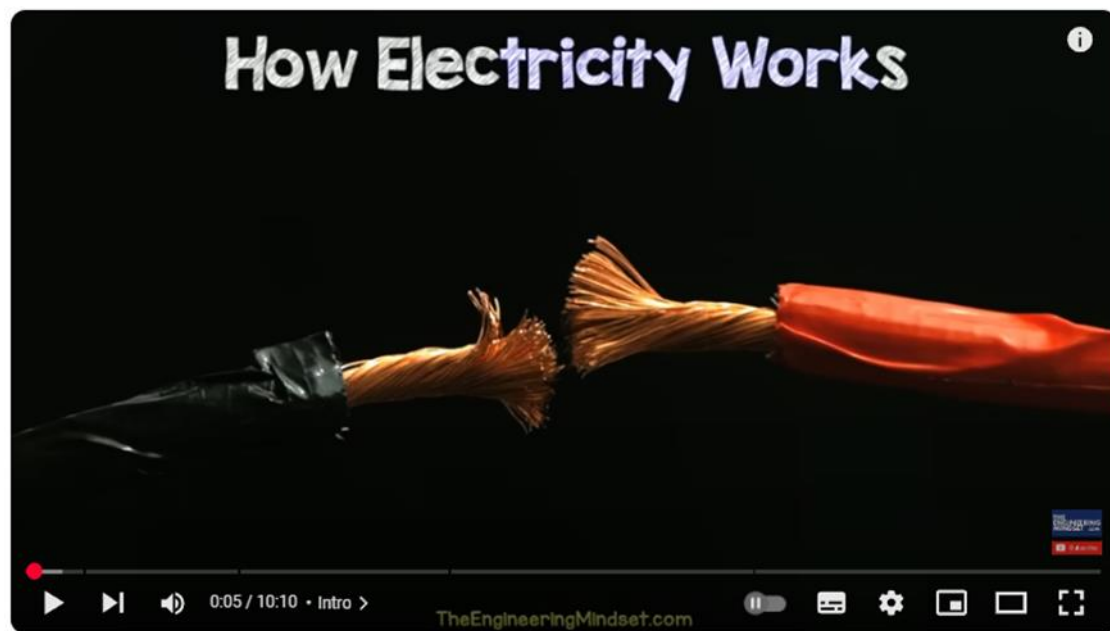
VIDEO 3.

<https://www.youtube.com/watch?v=mc979OhitAg>

ACTIVITY.

Watch the following video How Electricity Works and answer the questions. You can go to the CONFIGURATION BUTTON and set the subtitles in Spanish to follow it.

- 1) What is the Atom?
- 2) How many parts is it made of ?
- 3) What is the Nucleus and what can be found inside of it?
- 4) How do electrons travel?



Cómo funciona la ELECTRICIDAD - principio de funcionamiento

VIDEO 4.

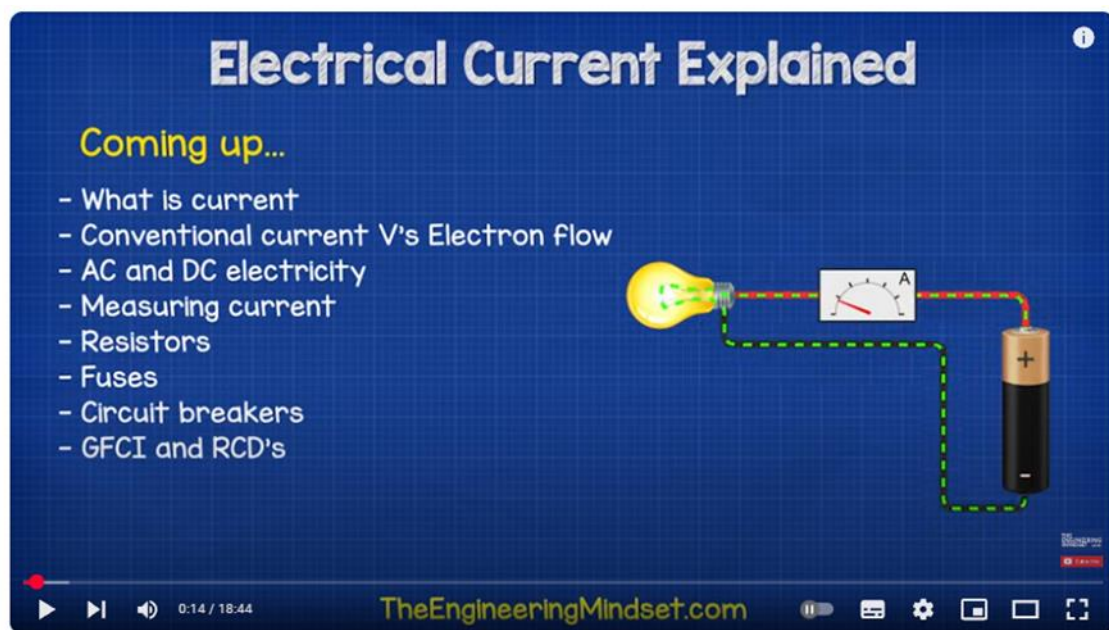
https://www.youtube.com/watch?v=kcL2_D33k3o

ACTIVITY.

*Watch the video about ELECTRICAL CURRENT and answer the questions.

- 1) What is current?
- 2) What are copper cables used for?
- 3) What type of unit is used to measure current?
- 4) What is Conventional Current?
- 5) What did Joseph Thompson discover?
- 6) How was Joseph Thompson's theory called?
- 7) What does the acronym AC stand for?

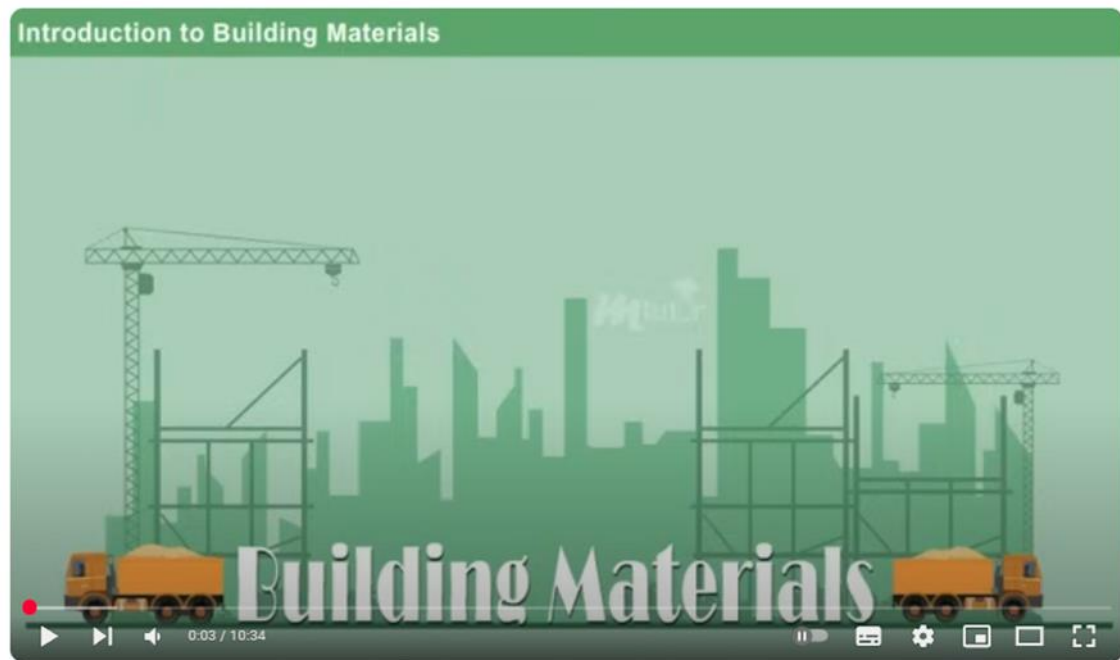
- 8) What does the acronym DC stand for?
- 9) Why do manufacturers need to test lamps and cables?
- 10) What is an Amp?
- 11) How much of a Coulomb does a circuit made up of a lamp and a battery need?
- 12) What does happen to electrons if the lamp shines brighter?
- 13) What happens to the lamp if the amount of voltage is huge?
- 14) What is an Overload Protection?
- 15) How is called GFCI in Europe?



Electrical Current Explained - AC DC, fuses, circuit breakers, multimeter, GFCI, ampere

VIDEO 5.

<https://www.youtube.com/watch?v=XsFeVuVQE-E>



Introduction to Building Materials

- 1) How much does a person spend in order to build his own house?
- 2) Does everyone succeed in having his own house?
- 3) Is it tough to buy building materials if you want to build your house?
- 4) What do people have to take into account when buying building materials?
- 5) How are building materials being classified?
- 6) What are Natural Building Materials?
- 7) Make a summary of each one.
- 8) Are natural building materials cheaper than artificial building ones?
- 9) What are Artificial Building Materials?
- 10) Write about them briefly.
- 11) How can Tiles be divided into?
- 12) How is glass manufactured?
- 13) What are the two types of metals

VIDEO 6.

<https://www.youtube.com/watch?v=1YTSjOqz07k>



- The video you are going to watch is of Bob, The Canadian's. He teaches English online. You may find that his pronunciation is quite similar to the US one.

-Watch the video and answer the questions. You can click on the subtitles button so that you can read what he is saying.

-Once you have answered all the questions, go back to the video and write the subtitles in your folder and translate them into Spanish.

- 1) What does Bob say about the word BRICK?
- 2) Is it possible to build a wall using blocks?
- 3) Do we have to hire a bricklayer?
- 4) What does the word BRICKLAYER mean in Spanish?
- 5) Is the use of stones challenging according to what Bob says?
- 6) What is Mortar?
- 7) What is Mortar made of and where has it to be put according to Bob?
- 8) What is Masonry?
- 9) What is Rebar used for?
- 10) Which unit of measure do Canadians use when buying pieces of wood to build their houses?
- 11) Where are studs?
- 12) What can we do with plywoods?

- 13) What are joists?
- 14) What are trusses?
- 15) Is it important to have the walls open for the plumber?
- 16) What is an Electrical Box?
- 17) What is Insulation?
- 18) What is a Vapour Barrier?
- 19) What is a Drywall and how is it called around the world?
- 20) What is Flooring?
- 21) Where is Wrapwall put?
- 22) What is STAIN?
- 23) Where are TRIMS put?
- 24) What are Shingles used for?
- 25) What is Siding?
- 26) What is EAVSTROUGH?
- 27) Is CAULKING like a paste?

*After answering the questions, make a list of the words Bob talks about and look for their Spanish meaning. You can use either a dictionary or the translator www.deepl.com

VIDEO 7.

<https://www.youtube.com/watch?v=y6wSkNorKeU>



- 1) What does Bob say about construction in Canada?
- 2) What do Canadians like to build?
- 3) How does Bob define the term Construction?
- 4) Which seasons are most common to build constructions in Canada? What happens in Winter?
- 5) What are the meanings of the phrases UNDER CONSTRUCTION and DRIVE SLOWLY. ROADS AHEAD ARE UNDER CONSTRUCTION.
- 6) What is the meaning of the verb TO BUILD in Spanish?
- 7) What is the meaning of the word CONSTRUCTION WORKER?
- 8) Is Construction work a very well paid job for students according to Bob?
- 9) What is a contractor and why do contractors wear a white hat?
- 10) Is the cartoon BOB, THE BUILDER a good cartoon when you are an English beginner learner?
- 11) What is a CONSTRUCTION SITE ? According to Bob, is it dangerous for people to be there? What is the meaning in Spanish of the term?
- 12) What is an ADDITION?
- 13) What does the term RENO stand for?
- 14) Look up the meaning of the word REMODEL.
- 15) What does Bob say about the term HOME IMPROVEMENT?
- 16) What is a BLUEPRINT and what is it used for?

- 17) What is the unit of measure used ?
- 18) When does ROADWORK start in Canada?
- 19) What is the meaning of ROADCREW?
- 20) What is the difference between the CONSTRUCTION SITE and the CONSTRUCTION ZONE?
- 21) What is a HARD HAT?
- 22) What are WORK BOOTS – SAFETY BOOTS? Why is important to wear this type of boots?
- 23) What are tools?
- 24) What is LEVEL used for?
- 25) What is a TAPE MEASURE?
- 26) What is a CORDLESS DRILL?
- 27) What is a POWER SAW?
- 28) What are SAFETY GLASSES and SAFETY GOGGLES?
- 29) What is HEARING PROTECTION used for?
- 30) What are NAILS and SCREWS?
- 31) Why is necessary to wear a SAFETY VEST?
- 32) How do we call the term PICK-UP – WORK TRUCK in Spanish?
- 33) What is a TRAILER and what do constructors used them for?
- 34) What is a SCAFFOLDING – SCAFFOLD? Are SCAFFOLDING illegal in Canada?
- 35) What is the difference between a STEPLADDER and an EXTENSION LADDER?
- 36) Write the meanings in Spanish of the words CARPENTER, PLUMBER, ELECTRICIAN, BRICKLAYER – BLOCKLAYER, and ROOFER.
- 37) What are CRANES ?
- 38) How is CEMENT MIXER called in Spanish?
- 39) What is a CEMENT TRUCK?
- 40) What is a DUMP TRUCK?
- 41) What is a BULLDOZER?
- 42) What is an EXCAVATOR? Can it be called a DIGGER?
- 43) What is a WHEELBARROW?
- 44) How do we call a JACKHAMMER in Spanish?
- 45) What is HOME IMPROVEMENT STORE – HOME DEPOT?
- 46) What is a LUMBER YARD?

47) What can we find in a HARDWARE STORE?

VIDEO 8.

The following video is of a Youtube Channel called ARTISAN ELECTRICIANS.

<https://www.youtube.com/watch?v=mXVFWifyEvU>



A Day in The Life of an Electrician UK

Once you watch the video, do the following activities.

- 1) Click on the subtitles button and transcribe them.
- 2) Open www.deepl.com and translate them into Spanish.
- 3) Answer the following questions.
 - a) How many jobs has this electrician got during the day?
 - b) What happened to his lunch and what did he do then?

c) What is an Insulation Test?

VIDEO 9.

<https://www.youtube.com/watch?v=XeVTBEFv-B0>



Should I get an Apprentice? Electrician Life

Jordan is an electrician from Cambridge and he received a video from Oscar, a college student, in order to work as an electrician apprentice. Watch the video, click on the subtitles button and answer the questions. You can help yourself using www.deepl.com to translate the subtitles into Spanish.

- 1) What is something interesting happening to Jordan on his day of work?
- 2) Why did Oscar contact Jordan?
- 3) Has Jordan been thinking of looking for an apprentice?
- 4) What did Jordan ask Oscar?
- 5) Did Jordan ask Oscar to send him a C.V?
- 6) Are they having a lot of jobs to do?
- 7) What does Jordan say about the lamp rewiring job?

- 8) What elements of the CONSUME UNIT is Jordan showing?
- 9) Is Jordan finally getting an apprentice? Does he want to create a team?
- 10) What does Jordan say about TRADIFY?
- 11) What has Oscar found about the socket?
- 12) What does Jordan suggest Oscar to do if there is no current in a socket?
- 13) What does Oscar need to know when using the Voltage Tester?

VIDEO 10.

<https://www.youtube.com/watch?v=slhqjBiBXo0>



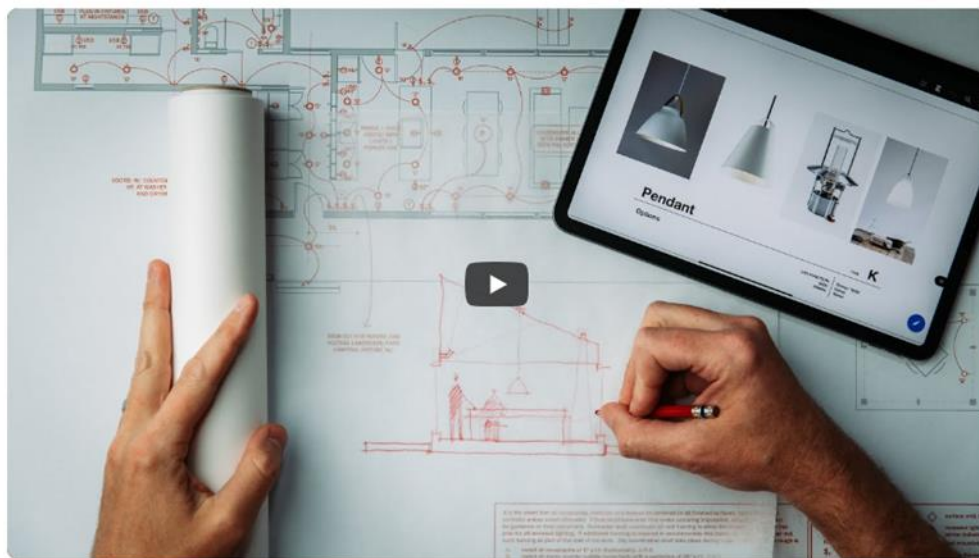
So You Want To Be An Electrician? The Best Of The Best! Some Advice and Some Tools You Will Need.

- 1) What does John say about having everything cleaned?
- 2) What tools does John recommend?
- 3) What does John say about insulated screwdrivers? Can they be replaced?
- 4) What is his opinion about Popladders?
- 5) How would you translate the phrase STANLEY KNIFE into Spanish?
- 6) Are Allen Keys essential for Electricians?
- 7) What can we find in Testers according to John?
- 8) What are PORTAGE FINGERS and what are they used for?
- 9) Why is important for an apprentice to ask as many questions as possible?

- 10) How much is a tool belt necessary for an electrician?
- 11) Which elements of the tool box is John showing?
- 12) What pieces of advice did John's grandfather give to him?

VIDEO 11.

<https://www.youtube.com/watch?v=4ORbpY6d9Zk>



How I Design + Draw Architectural Lighting Plans

- 1) What is light designing for this architect?
- 2) What does he do before lighting design?
- 3) What are the most important things in a lighting plan?
- 4) What are the three lights he says are important when beginning to design a lighting?
- 5) What colour does he use in the plan to locate the different lights in a house?
- 6) What is his general first lay out?
- 7) What does he say about RECESS LIGHTING?
- 8) What is the Gold Rule Of Thumb for him?
- 9) What does he do with the lights in Ceilings?
- 10) How does he organize the lights in the bathroom?
- 11) What kind of lights does he suggest for different layers?
- 12) Does he want to put a light next to each window?

- 13) What kind of light does he want to put on the dining table?
- 14) What type of lights does he suggest in one of the outside parts of the house where the windows are black?
- 15) What does he propose for the bathroom?
- 16) What kind of lighting from the magazine does he choose for the bedroom?
- 17) Have fixture types got different designations? Have they got letter designations, too? What about the symbols associated to letters and where can they be found?
- 18) What kind of software does he use?
- 19) Have light features different designations? What type of designation does he use for recess lighting?
- 20) Why did he put a housing?
- 21) What does he need to know?
- 22) Why does he want to add centerings?
- 23) What does he say about CIRCUITING?
- 24) How does he want to organize the lighting in the exterior part of the house?
- 25) Is really important that he has a meeting with an electrician to organize the lighting of the house?

TEST CRITERIA.

*Se tomará en cuenta la resolución de ejercicios a través de la resolución de ejercicios de vocabulario y la comprensión auditiva