

UNIT 3

Buying and Ordering Wiring Components

In this unit you are going to learn about

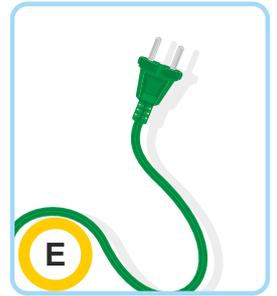
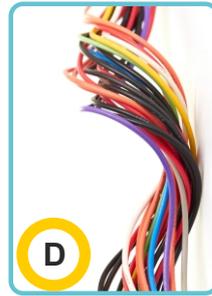
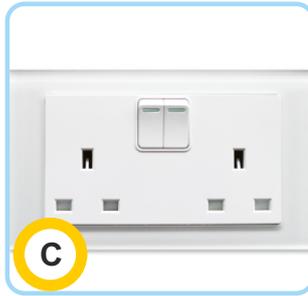
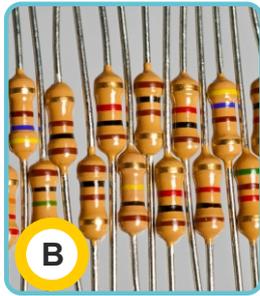
- buying and ordering wiring components
- checking a components list

Review

Present and discuss your materials from the previous lesson.

Warm-Up

- ★ Look at the pictures (A-E) below. Which of them are familiar to you? Write the letters. _____
- ★ Which of them can you find in your workshop at school? _____



Activity 1

Here are some electrical appliances that need wiring (kablo bağlantısı) in the home. Write the name of each one under the picture.













Activity 2a

Look at the following electrical wiring components. Match the English words with the Turkish ones.

- | | | | |
|-------|-----------|--------------------|-------|
| (>) | a. socket | sigorta = | _____ |
| | b. switch | fiş = | _____ |
| | c. plug | kablo = | _____ |
| | d. fuse | priz = | _____ |
| | e. cable | elektrik düğmesi = | _____ |



Activity 2b

Complete the missing parts of the three short dialogues. Use the five words in Activity 2a above.

Serena: This hair-dryer's no good!

Dan: What's wrong with it?

Serena: It isn't working.

Dan: Did you it on?

Serena: Yes of course!

Dan: Did you check the ?
Is it attached properly?

Serena: Yes, It's all right.

Dan: What happens when you press
the start button?

Serena: Nothing.

Dan: I see. It's time to buy another
one then.



Justin: What's wrong with this drill?

Brad: The battery's flat.

Justin: Why don't you
it in at the wall?

Brad: I can't. There's no
..... there.

Justin: Try using an extension
cord then!



Damon: Do you want this?

Stephan: Is it three amps?

Damon: Yes, it is.

Stephan: That's no good. I need
a four-amp one!



Activity 3

Look at the following switch types. Say which of them you have in your house?

I have a(n) _____ switch in my bedroom/living-room.

I don't have any _____ switches in my house.

My computer/ _____ has a(n) _____ switch.



Push-Button Switch



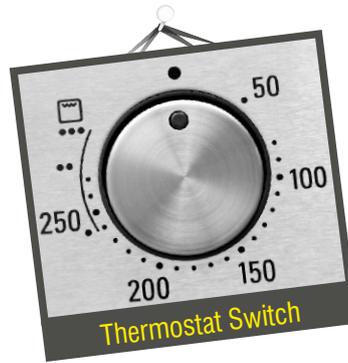
On / Off Switch



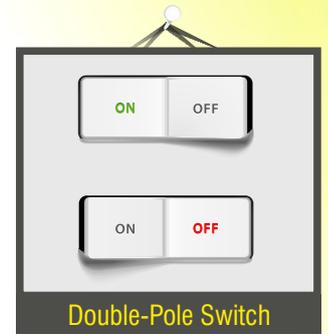
Slide Switch



Joystick Switch



Thermostat Switch



Double-Pole Switch



Activity 4

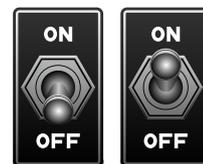
A Survey

As you see, there are many types of switches used for different purposes. Find all the different types in your school. You can ask your subject teacher for help to check the types of switches you find. (You can also use www.allaboutcircuits.com and www.en.wikipedia.org for switch types; and www.tureng.com for help with translations).

| SWITCH TYPE | | PLACE (at school) |
|--------------------|-------------------|----------------------|
| Turkish | English | |
| termostat anahtari | thermostat switch | in our laboratory |
| | | |
| | | |
| | | |
| | | |
| | | |

LANGUAGE
NOTE

We can also use the word 'switch' like this:
Can you switch on/off the light?
Switch(Turn) the light on/off, please!



Activity 5

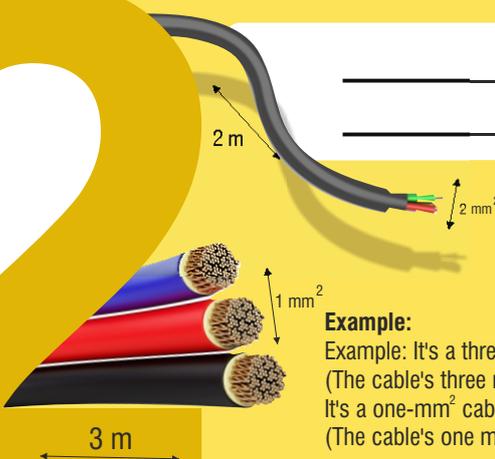
Make sentences about the following wiring components as shown in the example. Then say each one quickly to your partner.

1



Example:
It's a five-amp fuse.
(The fuse is five amps.)

2



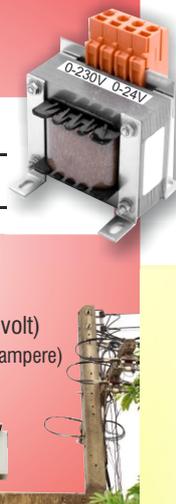
Example:
Example: It's a three-metre cable.
(The cable's three metres)
It's a one-mm² cable.
(The cable's one millimetre-square)

3



Example:
It's a 12V 0.5-amp adaptor. (twelve volt, zero-point-five ampere)

4



Example:
It's a 25 KVA (or 240 to 24 volt) transformer. (KVA= Kilowatt ampere)

5



Example:
It's a 3-amp (3A) plug.
(The plug's three amps)



We can also use the word 'plug' like this:
'Can you plug in the computer now?'



Activity 6a

Look at the following abbreviations. Tick those that you know. Then tell your friend what they stand for.

2P

mcb

6A

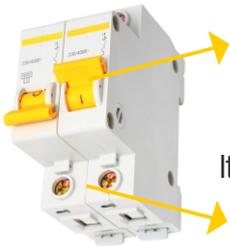
mccb

★Check with your friends if you do not know any.



Activity 6b

Look at the following circuit-breakers. Say the sentences again to your partner. Use the four abbreviations in Activity 6a for the highlighted words.



It's a **double-pole** circuit-breaker.

It's a **6-amp miniature circuit-breaker**.



It's a 630-amp single-pole **moulded-case circuit-breaker**



Activity 6c

Find three more types of circuit-breakers (You can use www.tureng.com for help with translations).

| Turkish | English | ABBREVIATION (IF ANY) |
|---------------------------|---------------------------|-----------------------|
| e.g Minyatür devre kesici | Miniature circuit breaker | mcb |
| | | |
| | | |
| | | |



Activity 6d

Five of the sentences below are incorrect. Correct only the wrong ones by re-writing them and adding or deleting a letter/letters.

1. I need a five-amp fuse.

2. This cable is two metre.

3. Do we have a five-amps plug?

4. It's a five-metre cables.

5. It's a 630-amps mccb.

6. Do you have a two-amps fuse?

Activity 7a

You are going to buy the components below. Your friend, Habib, works at an electrical store. So you phone him to order them. First look at the pictures. Then complete the short dialogue below.



60W-12V-5A



Mcb 230V Single Pole



Mccb 4P



120-240 V

Activity 7b

Now read the telephone conversation again. Find example phrases to complete the table below.

USEFUL TELEPHONE PHRASES

Starting the call

Ending the call

| |
|--|
| |
| |

| |
|--|
| |
| |

Activity 8a Checking Component List

Read the e-mail below Then look at the picture.

Dear David,



Here is the list of the components you asked me to send. The components are in the box. Call me if you have any problems.

Abdul



COMPONENT LIST

3 x 13-amp sockets
2 x 16-amp three-pole circuit-breakers
4 x 3-amp plugs
1 x 230V-12 V 0.5-amp adaptor

★Are all the wiring components correct? Check the components against the list, as shown in the box above.

Use these cues to help you:

Student A: Do we have three sockets?

Student B: No, we have two!

Student A: Do we have _____ ?

Student B: _____

DIALOGUE

You: Hello. Is that Magic Electricity?

Shop assistant: Yes, it is...

You: Can I speak to Habib, please?

Shop assistant: Yes, of course. Hold on, please!

....

Habib: Hello. This is Habib. Who's speaking, please?

You: Hi, Habib. It's Eric. How are you?

Habib: Oh, hi!. Not bad, thanks. How can I help you?

You: I need some components. Can I give you the list?

Habib: Yes...Just a second. I need a pen...

Yes, OK I'm ready.

You: I need a three-amp fuse, _____,

and _____.

Habib: OK. I'll send them today. Anything else?

You: No, thanks very much.

Habib: You're welcome. See you soon, bye!

Activity 8b

John calls Abdul, but Abdul is out. John leaves the following message. Complete it with the words from the box.

cables sockets circuit-breakers adaptor wiring



'Hi, Abdul! It's John. I got your email about the _____ components I need. I'm afraid we have some problems. Some components are missing. I needed two 16-amp three-pole _____ but you sent me only one. One of the three 3-amp _____ is also missing. You also sent some extra components. I asked for one 230V-12V 0.5-amp _____, but you sent me four! I didn't ask for any _____ but you sent me two. Can you please call me about this. Thanks

Activity 8c

Look at the four phrases below, taken from the message above. Translate them into Turkish.

- | | |
|--------------------------------------|----------|
| a. I got your mail. | a. _____ |
| b. I'm afraid we have some problems. | b. _____ |
| c. You sent some extra components... | c. _____ |
| d. Some components are missing... | d. _____ |

Activity 9 Understanding a Component List

You visit Abdul in his store to buy some wiring components. This is the component list in the electrical store. Look at it carefully and complete the conversation.



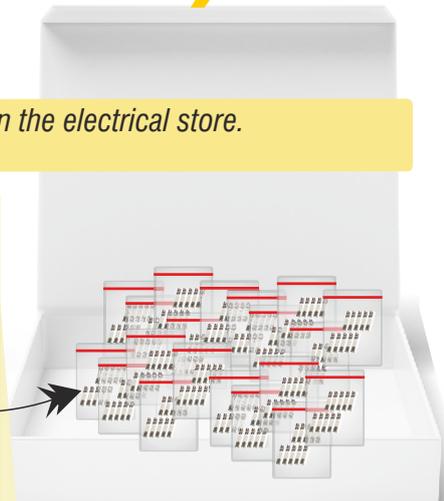
There are ten fuses in a pocket.

Doc. Ref: Drb 04-11

Date : 03 May

Stock Control Storeroom B-Peter BERNIE/electrical

| Ref. | Item | Quantity in stock |
|---------------|--------------------------|-------------------|
| 203/11-9 | 10 x 13 amp-fuse | 25 |
| 203/10-1.5 | 30 x 10 amp-fuse | 40 |
| 199/07-25 | 10 x 600 mm cable | 22 |
| 199/07-40 | 11 x toggle switch | 30 |
| 361/22-10 | 20 x push-button switch | 55 |
| 361/22 -13 | 10 x 12V.0.5-amp adaptor | 28 |
| 524/04 -1x100 | 10 x 3amp-plug | 12 |



There are twenty-five pockets of fuses in a box.

You: Hi, Abdul. How are you?

Abdul: Hi, John. It's nice to see you again. I'm fine, thanks. How about you?

You: I've been very busy recently, but I'm OK.

Abdul: How can I help you?

You: I need some components.

Abdul: OK, just a minute. I'll find the component list . . . OK, I'm ready.

You: I need fifteen 3-amp plugs.

Abdul: I'm afraid we've only got _____.

You: OK, that will do. And I need eleven 600 mm cables.

Abdul: OK. I have _____. No problem.

You: Do you have any toggle switches?

Abdul: Yes, how many do you need?

You: Fifty-five.

Abdul: Sorry, I've only got _____.

You: Ah! That's no good.

Abdul: What about push-button switches? I can give you push-button switches instead.

You: No, they're no good to me.

OK, forget about them! I'll find them somewhere else.

Do you have any fuses?

Abdul: Yes, what kind do you need?

You: Er...twenty 10-amp fuses, and forty-five 13-amp ones.

Abdul: OK. I have enough _____ but I don't have enough _____.

PROGRESS AND SELF-ASSESSMENT

In this unit,

- I liked _____
- I did not like _____
- I learnt _____
- I learnt the following new words/phrases _____

1 Write the names of the common wiring components.

CHECK WHAT YOU REMEMBER



Common Wiring MATERIALS

switch

2 First look at the pictures below. Then write the names of each component in the eight boxes.

A

B

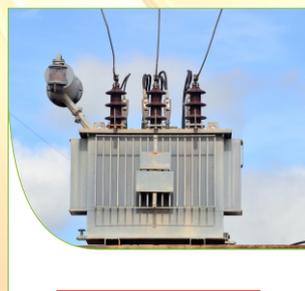
C

D

1



2





Now test your partner. Take turns to ask and answer like this:

A- What's in A1?

B- A(an) _____. OK, it's my turn.
What's in B2?

etc . . .

3

Make groups of two or three. Each group will have labels in different colours. You will find the components below in the laboratory.

plug

adaptor

cable

socket

switch

transformer

fuse

circuit
breaker

Write the name of each component on a label and stick it on the components you find. Do not stick two labels on the same component. The group which has the most labels wins the competition.