

FUNDAMENTALS OF

# Automotive Technology Online

**CDX** Learning Systems™

## Find and Use DVOM Simulations

*Instructor and Student Training Series*

## Topics covered in this tutorial:

- How to find and use dvom simulations in your CDX courses.

### Need further instruction?

Visit <http://www.cdxauto.com/TrainingLibrary>

### Need support?

Contact the CDX Support Helpdesk

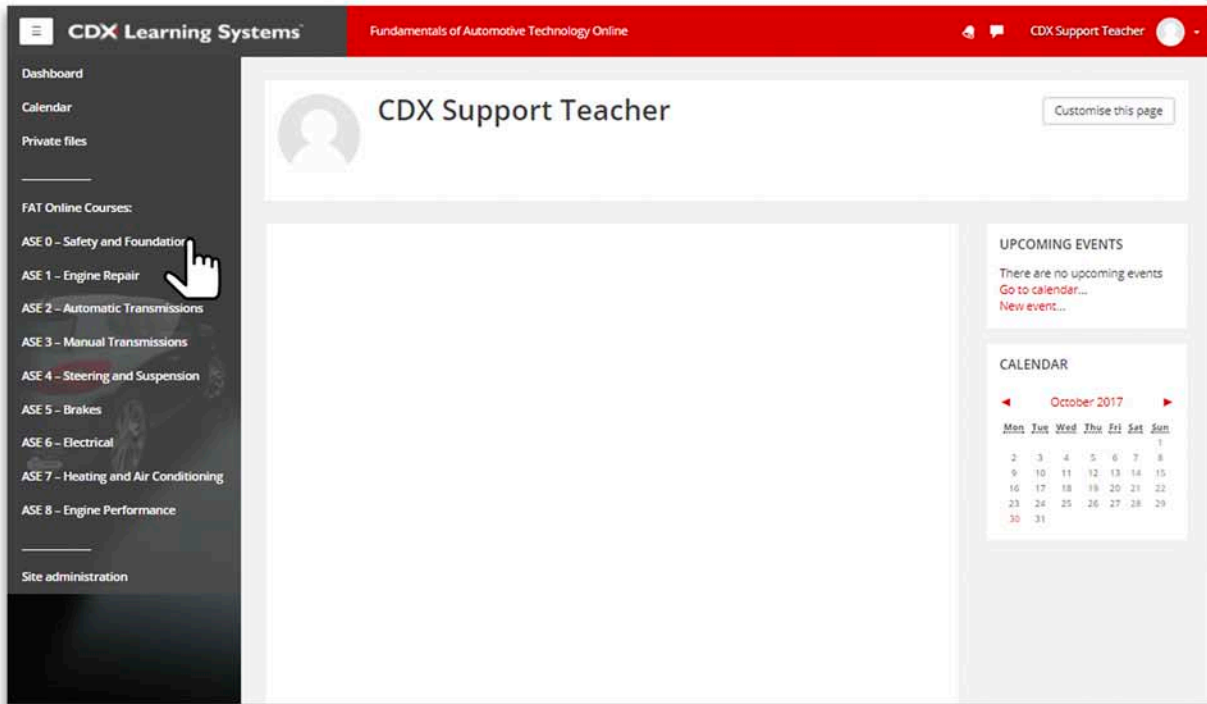
Email: [cdxsupport@partnerinpublishing.com](mailto:cdxsupport@partnerinpublishing.com)

Phone: 1-844-273-7537

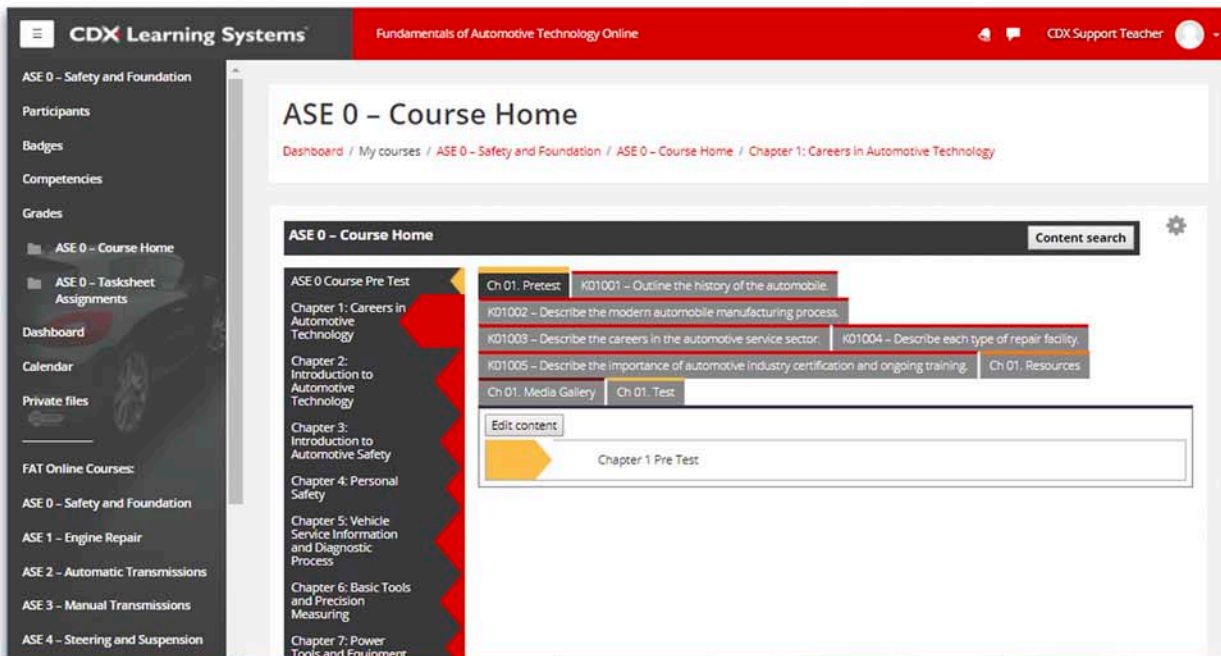
Certain Chapters contain DVOM Simulations that help students visualize and understand electrical systems in vehicles..

Begin by logging into your account at [cdxauto.com](http://cdxauto.com) and navigating to your CDX Product.

To access them, click on the course that contains the DVOM Simulations you want to access from the navigation on the left.

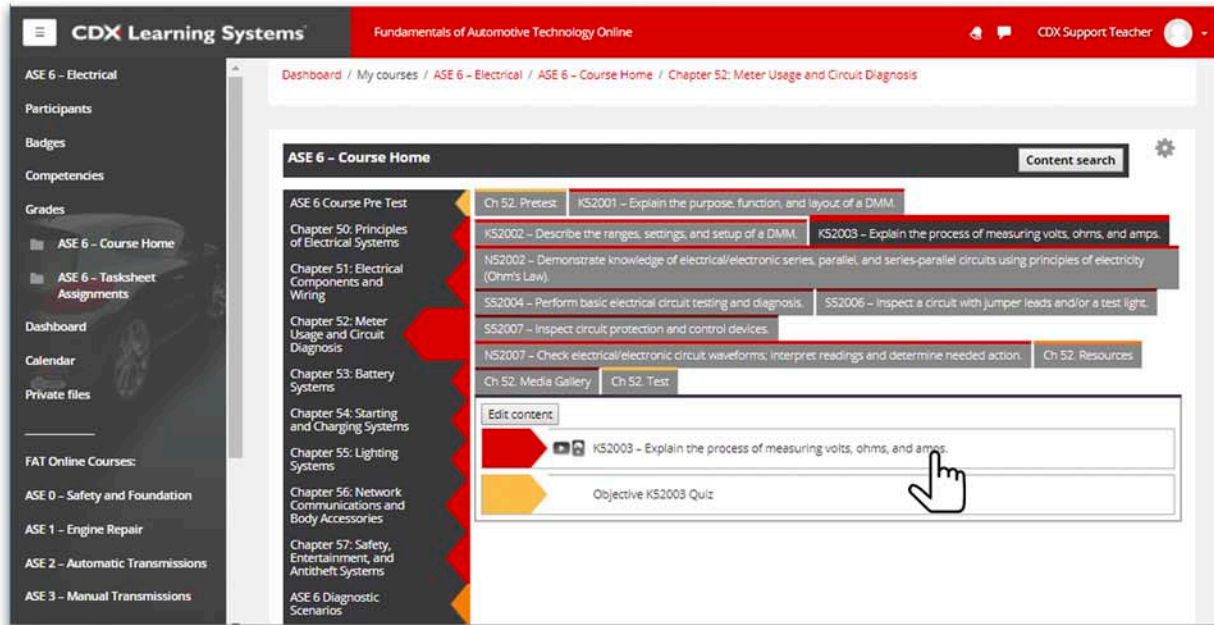


This will bring you to a page with all the chapters down the left with the sections of the currently selected chapter across the top.

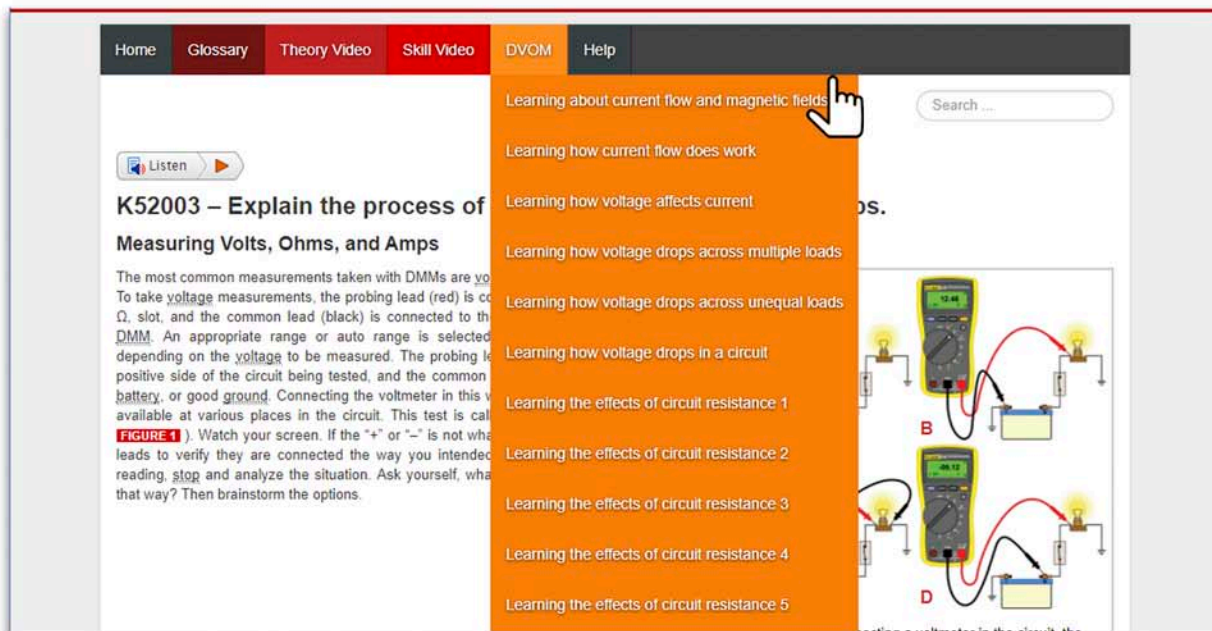


As you click through the Knowledge Areas, you will see a voltage meter icon next to some of the readings. That icon denotes that there is a DVOM Simulation with that reading.

Click on that reading and it will open in a new window.




At the top of the page you will see an orange button labeled DVOM. Hovering your mouse over that button will expand a list of all simulations associated with that reading. Click on one to open the Simulation.




The simulation will have general instructions and a question on the right, and if you hover your mouse over any pieces of the simulation, you will get a description of that part and how to use it in the simulation.

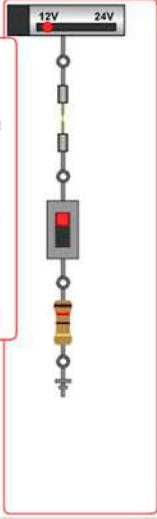
**HELP Screen**



**Circuit Components:**  
Some circuit components, such as switches and potentiometers have interactive controls, others such as bulbs and LED's will change their appearance based on the current and voltage in the circuit.

All the circuit components have a rollover function that indicates the component symbol, name and rating.

A full legend is available to link each symbol used in circuit diagrams by pressing the  button.



**Multimeter Experiments**

**Learning how voltage affects current**

Set the voltage supply to the same value as the simulation. With the circuit connected to the voltage source, measure the resistance and voltage across the resistor and the current flow through it.

Click on the answer corresponding to your result. If your answer is not correct, check your meter and probe settings, and perform the measurement again.

**Question 1** **Next**

**Measured Resistance (Switch off)**

- 050.0  $\Omega$
- 100.0  $\Omega$
- 120.0  $\Omega$
- 200.0  $\Omega$
- 220.0  $\Omega$
- OL M $\Omega$

Learning how voltage affects current

Note that A and  $\Omega$  are available voltage tests. V and U are