



Workshop News

"Building Your Home Improvement Skills"

Special points of interest:

**"Let There Be Light"
(Electrical Basics)**

Is now on the calendar!

www.workshopforwomen.com

Register Today!

[www.workshopforwomen.com/
registration.html](http://www.workshopforwomen.com/registration.html)

- July & August classes are scheduled - visit www.workshopforwomen.com
- Pictures from the 2006 Women Build House on our website!

Women in History July Birthdays

July 7, 1861 - Nettie Stevens (discovered X and Y sex chromosome)

July 8, 1926 - Elisabeth Kubler-Ross (developed techniques for counseling the dying and their families)

July 10, 1875 - Mary McLeod Bethune (Black educator)

July 16, 1821 - Mary Baker Eddy (Founder, Church of Christ Scientist)

July 12, 1856 - Louise Bethune (First woman architect, 1881)

July 23, 1844 - Harriet Strong (Agriculturist; patented water storage dams)

July 24, 1920 - Bella Abzug (Lawyer; NY Congresswoman, 1972-1976)

July 28, 1879 - Lucy Burns (Suffragist; leader of Congressional Union with Alice Paul)

How Does Power Reach Our Homes?

Power plants produce large amounts of electricity. This electricity is transported to substations throughout your region at a very high voltage. The electricity eventually reaches a **transformer**. This transformer converts the high voltage electricity into 120V or 240V for use in your home.

The power is then transported via power lines, above or below ground, to your home.

This current enters your home first through the electrical meter and then into your **service entrance panel** or breaker box for use throughout your home. The service panel is the heart of all your homes power. Many older homes have service panels which contain **fuses**. Newer homes have service panels

which contain **circuit breakers** (also known as "overcurrent protection devices").

Terms and Definitions

Transformer - a piece of electrical equipment used by the electric utility to convert the high voltage of the utility system to the 120/240 **volts** required for residential electrical systems.

Service Entrance Panel - The main circuit breaker panel (or fuse box) where all the individual circuits are connected to the main incoming electrical supply line.

Breaker or Circuit Breaker - A switch-like device that connects/disconnects power to a circuit. The most common type of "overcurrent protection". A breaker trips when a circuit becomes overloaded or shorts out. The **Main Breaker**

is the on/off switch for ALL of the electricity supplied to your home and is located in your service panel, usually at the top of the box above the individual circuit breakers.

Fuses - Removable devices that link a circuit at the fuse box. Fuse connections blow apart and break the circuit if an overload or short occurs.

Volt - A unit that measures the amount of electrical *pressure*.

Watt - A unit that measures the amount of electrical *power*.

Amp (Ampere) - A unit that measures the *strength*/rate of flow of electrical current.

"Let There Be Light" (Electrical Basics)

Workshop for Women is now offering a class in basic electrical skills. The class is comprised of **6 hours of instruction** offered in **2 sessions**. The cost is: **\$ 150.00**. As with all Workshop for Women classes there will be plenty of **hands-on** practice and we provide all the tools and materials you will need.

Session 1

- Safety, Tools & Materials
- Service Panel & Circuit Breakers
- How to test your devices and circuits.
- Proper wiring techniques
- Mapping the Circuits in your home
- Basic Troubleshooting

Session 2

- Tools, Material & Testing of Electrical Devices
- Basic Wiring Skills & Techniques
- Replacing switches, receptacle, light fixtures.
- **Installing a dimmer switch.**
- **Wiring a ceiling fan.**