Today there are many lighting options available. The right bulb for you depends on how much light you need, what color light you want, and its costs and features.

**STEP 1  Decide How Much Light You Need**

**Focus on Brightness.** Different amounts of light are needed for different uses. Instead of thinking about light bulbs based solely on the amount of energy they use, focus on their brightness level.

**Lumen** is the measurement of brightness. Higher lumen bulbs produce brighter light.

**Watt (W)** is the measure of power consumption. Lower wattage bulbs can lower your electric bills.

If you like your bulb’s current brightness, choose a CFL or LED with similar lumens to reduce your energy use. You may also consider a bulb that is less bright to save more.

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**Note:** Lumen output listed on packages may vary. Light bulbs listing anywhere from 800 to 860 lumens are similarly bright, for instance.

<table>
<thead>
<tr>
<th>Brightness</th>
<th>Incandescent</th>
<th>CFL</th>
<th>LED</th>
</tr>
</thead>
<tbody>
<tr>
<td>450 lumens</td>
<td>40W</td>
<td>9-13W</td>
<td>4-8W</td>
</tr>
<tr>
<td>800 lumens</td>
<td>60W</td>
<td>13-16W</td>
<td>8-13W</td>
</tr>
<tr>
<td>1100 lumens</td>
<td>75W</td>
<td>17-23W</td>
<td>11-15W</td>
</tr>
<tr>
<td>1600 lumens</td>
<td>100W</td>
<td>23-28W</td>
<td>16-20W</td>
</tr>
</tbody>
</table>

**STEP 2  Decide What Color Light You Want**

**Choose Light Appearance.** You’ll be pleased with your new bulb by choosing a light appearance that you like. All of these colors are available for LEDs and CFLs and at most brightness levels.

**Note:** Choose warm or soft white (2700-3000 K) to match the color of incandescent bulbs.

**Different Colors, Same Brightness**

- **Soft White, Warm White** Living Room, Bedroom
- **Bright White, Cool White** Kitchen, Bathroom, Dining Room
- **Natural, Daylight** Office, Laundry, Workshop, Garage

<table>
<thead>
<tr>
<th>Light Appearance</th>
<th>2700K</th>
<th>3000K</th>
<th>3500K</th>
<th>4100K</th>
<th>5000K</th>
<th>6500K</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Warm Color</em></td>
<td></td>
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<td></td>
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<tr>
<td><em>Light Appearance</em></td>
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<td></td>
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<tr>
<td><em>Cool Color</em></td>
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</tbody>
</table>
**STEP 3**  
Think About Costs and Benefits

**Compare Types of Light Bulbs.** You can think about product, replacement, and energy costs over 20 years for different bulb types. Why 20 years? Because LEDs can last that long. Some incandescent bulbs are being phased out and will soon be unavailable. The pros and cons of LEDs and CFLs will help you pick a bulb that is right for you.

<table>
<thead>
<tr>
<th>Cost Over 20 Years</th>
<th>Bulb(s)</th>
<th>Energy</th>
<th>Pros (+) and Cons (-)</th>
</tr>
</thead>
</table>
| **LED**            | ![LED bulb](image) | 1 bulb in 20 years | $35 total cost | + Saves 85% of energy use over incandescent  
+ Lasts 25 times longer than incandescent  
+ Great for dimmed, recessed, or enclosed fixtures  
+ Performs well in cold temperatures  |
| **CFL**            | ![CFL bulb](image) | 3 bulbs in 20 years | $54 total cost | + Saves 75% of energy use over incandescent  
+ Lasts 10 times longer than incandescent  
- Recessed & enclosed fixtures reduce bulb life  
- Performs poorly in cold temperatures  
- Contains mercury (recycling required) |
| **Incandescent**   | ![Incandescent bulb](image) | 22 bulbs in 20 years | $284 total cost |

**Note:** Cost comparison is based on a 20-year life and takes into account power consumption, hours of use per day, residential electric cost, bulb cost, and replacement cost. For detailed cost calculations and a full pro/con list, visit [http://Lighting.MnCERTs.org](http://Lighting.MnCERTs.org).

**Buy Your New Bulbs.** The *Lighting Facts* label on all bulb packaging clearly shows light appearance and brightness. The label also includes the ENERGY STAR® logo when a bulb meets the required certification levels for high efficiency, performance, and reliability.

**Lighting Facts** Per Bulb

- **Brightness**: 800 lumens
- **Estimated Yearly Energy Cost**: $1.14  
  Based on 3 hrs/day, 11¢/kWh  
  Cost depends on rates and use
- **Life**: 22.8 years  
  Based on 3 hrs/day
- **Light Appearance**
  - Warm: 2700 K
  - Cool
- **Energy Used**: 9.5 watts

**STEP 4**  
Find Rebates and Resources

Contact Owatonna Public Utilities at 507-451-2480 or [www.owatonnautilities.com](http://www.owatonnautilities.com)

Learn, ask questions, and recycle CFLs  
[http://Lighting.MnCERTs.org](http://Lighting.MnCERTs.org)  
Minnesotans building a clean energy future