



**PROBLEM A**    **HOW MUCH ENERGY & MONEY DO NEW LIGHT BULBS SAVE?**    Multiplication  
(Multiples of 10)

The table below shows how much electricity each light bulb uses to light your room for 1 hour. Both bulbs put out the same amount of light.



| Type of light bulb   | Electricity use<br>(Watt hour (Wh)) |
|--|-------------------------------------|
| Regular light bulb<br>          | 100                                 |
| Energy saving<br>Light bulb<br> | 30                                  |

1. Typically, we use lighting fixtures for 5 hours a day. How much electricity do you use per day if you use a regular light bulb?
2. How much electricity do you use if you use an energy saving light bulbs for 5 hours a day?
3. How much electricity can you save in 5 hours if you replace a regular light bulb with an energy saving light bulb in one of your light fixtures?
4. How much electricity can you save in 5 hours if you replace regular light bulbs with energy saving light bulbs in two of your light fixtures?



**PROBLEM A-2 HOW MUCH ENERGY & MONEY DO NEW LIGHT BULBS SAVE?** Multiplication  
(Multiples of 10)

The table below shows how much electricity each light bulb uses to light your room for 1 hour. Both bulbs put out the same amount of light.



| Type of light bulb   | Electricity use<br>(Watt hour (Wh)) |
|--|-------------------------------------|
| Regular light bulb<br>          | 100                                 |
| Energy saving<br>Light bulb<br> | 15                                  |

- Typically, we use lighting fixtures for 5 hours a day. How much electricity do you use per day if you use a regular light bulb?
- How much electricity do you use if you use an energy saving light bulbs for 5 hours a day?
- How much electricity can you save in 5 hours if you replace a regular light bulb with an energy saving light bulb in one of your light fixtures?
- How much electricity can you save in 5 hours if you replace regular light bulbs with energy saving light bulbs in two of your light fixtures?



## Answer Key

The table below shows how much electricity each light bulb uses to light your room for 1 hour. Both bulbs put out the same amount of light.

| Type of light bulb   | Electricity use<br>(Watt hour (Wh)) |
|--|-------------------------------------|
| Regular light bulb<br>          | 100                                 |
| Energy saving<br>Light bulb<br> | 30                                  |

1. Typically, we use lighting fixtures for 5 hours a day. How much electricity do you use per day if you use a regular light bulb?

$$100 \times 5 = 500 \text{ (Wh)}$$

2. How much electricity do you use if you use an energy saving light bulbs for 5 hours a day?

$$30 \times 5 = 150 \text{ (Wh)}$$

3. How much electricity can you save in 5 hours if you replace a regular light bulb with an energy saving light bulb in one of your light fixtures?

$$500 - 150 = 350 \text{ (Wh)}$$



4. How much electricity can you save in 5 hours if you replace regular light bulbs with energy saving light bulbs in two of your light fixtures?

$$350 \times 2 = 700 \text{ (Wh)}$$



## Answer Key

The table below shows how much electricity each light bulb uses to light your room for 1 hour. Both bulbs put out the same amount of light.

| Type of light bulb   | Electricity use<br>(Watt hour (Wh)) |
|--|-------------------------------------|
| Regular light bulb<br>          | 100                                 |
| Energy saving<br>Light bulb<br> | 15                                  |

1. Typically, we use lighting fixtures for 5 hours a day. How much electricity do you use per day if you use a regular light bulb?

$$100 \times 5 = 500 \text{ (Wh)}$$

2. How much electricity do you use if you use an energy saving light bulbs for 5 hours a day?

$$15 \times 5 = 45 \text{ (Wh)}$$

3. How much electricity can you save in 5 hours if you replace a regular light bulb with an energy saving light bulb in one of your light fixtures?

$$500 - 45 = 455 \text{ (Wh)}$$

4. How much electricity can you save in 5 hours if you replace regular light bulbs with energy saving light bulbs in two of your light fixtures?

$$455 \times 2 = 910 \text{ (Wh)}$$

