

# Hydroponic Light Systems

Developed by a "Hydro Helper" Student, Spring 2014

Use this [Lighting link](#), Read and answer the questions below the different types of lights!

Types:

- ❖ Metal Halide Bulbs
- ❖ High Pressure Sodium Bulbs
- ❖ LED Grow Lights
- ❖ High Output fluorescent
- ❖ Compact fluorescent lights

## Metal Halide Bulbs

- 1) Why do gardeners recommend this light? (3 sentences)
- 2) What does having good lumen maintenance mean? (2 sentences)
- 3) After how long until they should be replaced (1-2 sentences)
- 4) Why are they considered the best lights? (1-2 sentences)

## High Pressure Sodium Bulbs

- 1) What types of plants grow best under this kind of bulb?
- 2) How long can these lights last?
- 3) Because of the focus on red light spectrum the plants tend to be...

## **LED Grow Lights**

- 1) What do the plants result look like? (2-5 sentences)
- 2) The fruits and flowers are more... (1 sentence)
- 3) How much of the electricity does it use? (1 sentence)
- 4) Who do the lights work best for? Who don't they work best for? (2 sentences)

## **High Output Fluorescents**

- 1) Where do you have to position the light? (1 sentence)
- 2) How many lumens do they put out per tube? (1 sentence)
- 3) They do not emit... (1 sentence)

## **Compact Fluorescent Lights**

- 1) Where do they work best? (1 sentence)
- 2) What should you use for plants taller than a foot? (1 sentence)
- 3) What do they not produce much of? (1 sentence)

## **Design!**

Imagine you are going to start a small hydroponic system at your house to grow fresh vegetables and herbs. If you had to choose one light to use, what one would it be and why? (5 sentences)

Do a Google Search for a the grow light that you chose. Spend some time trying to find the best one for you application. When you find a grow light that you think would be good for your application, record as much information that you can find.

- ✓ Type of light:
- ✓ Product Name:
- ✓ Dimensions:
- ✓ Recommended Grow area:
- ✓ Cost:
- ✓ Warrantee:
- ✓ Wattage:
- ✓ Estimated time how long it will last:

