**Plant Needs 4.01, P:1**

**Ideal quantities of all the plant needs will give \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ plant growth.**

P**lace**

Where are traditional places plants grow?

Where are some weird places that plants grow?

What is the story of Edelweiss?

What plant function requires light?

What happens when there is too much light?

What happens when there is too little light?

What is *Photoperiodism*?

What plant do you know that needs short days to bloom?

Where are some weird places that plants grow?

What is the story of Edelweiss?

**Light**

**Air**

What happens to the soil when all of the air is removed from a plant’s growing media?

What happens to the plant if all of the media is filled with water and not air?

What can people do to change the air surrounding a plant?

What are the three nutrients plants must have to function?

What happens if a seed is planted directly in nutrients (fertilizer)?

What is a natural or organic way of providing nutrients for plants?

What are some symptoms when plants do not have enough nutrients?

**Nutrients**

What is a plant that likes extreme hot temperatures? Cold?

What is a USDA hardiness Zone?

What zone do we live in? What about Asheville? Wilmington?

**Temperature**

Why do most plants need a lot of water?

How much should you water a houseplant? A garden?

How should you water a plant? When?

What plant symptoms are associated with overwatering plants?

Why is drowning of plants caused?

S**ome water**

**Cause and effect**

**Find out what was the cause or the effect of each of the following horticultural situations.**

|  |  |
| --- | --- |
| **Cause** | **Effect** |
|  | **Small root systems, taller than normal plants, soft new growth.** |
| **Essential environmental factors such as moisture, nutrients, light and temperature are ideal.** |  |
|  | **Tall slender stems.** |
|  | **Will burn the seeds if planted directly in this.** |
| **The effect that length of day has on plant flowering** |  |
| **Underwatering or watering too little for a greenhouse plant.** |  |
| **Unfavorable environmental conditions for plant growth.** |  |
| **Plants are made mostly of water.** |  |
| **Water fills the air spaces in the soil.** |  |

**Possible Causes and Effects**

Put these causes or effects in the table above, where they belong!

\*Wilting \*Seedlings that receive too little light

\*Photoperiodism \*Overwatering

\*More diseases \*Optimum Growth

\*Fertilizer (Mineral Nutrients) \*Needs high quantities of water

\*Extreme overwatering of plants will cause them to drown