**GRADE 1 & 2**

* ***Do seeds germinate at different rates?***
* **bean seeds – microgreens and bean seed(s) - notebook**
* **cups (4) - pencil**
* **marker**
* ***Which fruits and vegetables make the best dye?***
* **select 3-4 fruits and/or vegetables to test - detergent**
* **washer - white shirt (cut into strips)**
* **large pot - water**
* **knife**
* ***What type of water affect the growth of plants the most: spring, tap, or distilled?***
* **cups (6) - ruler**
* **soil - bean seeds**
* **water (select 3 different types)**
* ***Which material absorbs heat most efficiently: sand, soil, or rocks?***
* **rocks - sand**
* **soil - thermometer**
* **heating source (select one - sun, microwave, or oven)**

**GRADE 3**

* ***Do vitamins or fertilizers affect the growth of plants?***
* **water - soil**
* **cups (6) - bean seeds**
* **plant fertilizer - vitamins (crushed)**
* **ruler**
* ***What is the effect of white vinegar, soapy water, and tap water on plant growth?***
* **cups (6) - white vinegar**
* **dish soap - tap water**
* **ruler - bean seeds**
* **sunny area - soil**
* ***What has the greatest effect on household plants: artificial or natural light?***
* **red light *-* blue light**
* **cups *-* water**
* **soil *-* bean seeds (pick 3 types)**

**GRADE 4 & 5**

* ***Which filter will clean water the best: activated charcoal, sand, or rocks?***
* **coffee filters - rubber bands**
* **cups (6) - water**
* **cotton balls - activated charcoal**
* **sand - rocks**
* **scissors - 2-liter bottle (3)**
* ***Which material absorbs heat most efficiently: sand, soil, or rocks?***
* **rocks - sand**
* **soil - thermometer**
* **heating source (select one - sun, microwave, or oven)**
* ***Do vitamins or fertilizers affect the growth of plants?***
* **water - soil**
* **cups (6) - bean seeds**
* **plant fertilizer - vitamins (crushed)**
* **ruler**
* ***Does temperature affect the growth of seeds or plants?***
* **cups (6) - soil**
* **water - thermometer**
* **scissors - heating source**
* **bean seeds**