



# LINKS TO AGRICULTURE



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## Pigment Power

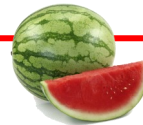
Vegetables and fruits provide many nutrients for our bodies but have you ever looked at a banana and wondered why it's the color it is? Phytochemicals are made by plants to give fruits and vegetables their color. These phytochemicals help the fruits fight off disease and infections. By eating different colored fruits and vegetables, we can get these health benefits as well!

These are some of the Phytochemical families. Some of the families can have more than 1 color; or they can be different shades of that color.

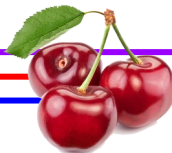
**Zeaxanthin** Lemons  
and Mustard



**Lycopene** Tomatoes,  
Watermelon, and Pink  
Grapefruit



**Anthocyanins**  
Grapes, Cherries,  
and Blueberries



**Beta - Carotene**  
Oranges, Carrots



**Lutein**  
Parsley, Celery, and  
Lettuce

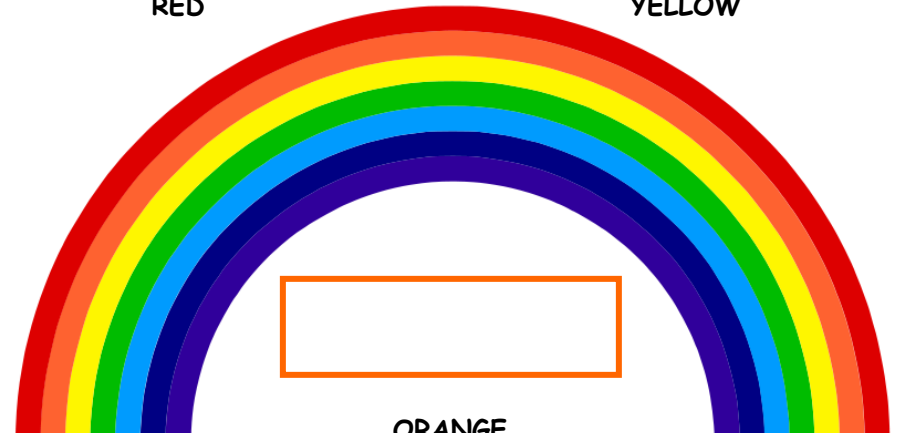


## Use What You've Read

Think about what you ate today... Think about what color each of those things were... Try to eat one item from each color from the rainbow and write down what you ate.

RED

YELLOW



ORANGE

GREEN

BLUE/PURPLE



# Career Corner

**Food Chemist** - Food Chemists are scientists who study how foods interact with the human body at the most basic level. Their work promotes food safety, and helps doctors and dietitians understand the requirements of healthful nutrition.

### How Food Chemists Benefit Agriculture:

- Food Chemists say what's good to eat
- Promote food products to the public

### Food Chemists Study:

- Chemistry
- Biology

SCAN ME



## What colors are really in the leaves???

- You will need :
- |                         |             |
|-------------------------|-------------|
| coffee filters          | foil        |
| 3 different fall leaves | 3 pencils   |
| 3 small glass cups      | scotch tape |
| Rubbing alcohol         | scissors    |

Leaf A Colors

Leaf B Colors

Leaf C Colors

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### Directions

- \* Each leaf will have one small glass cup. Rip each leaf into small pieces and put them in the assigned cup.
- \* Add just enough rubbing alcohol to cover the leaf pieces.
- \* Cover the glass cups with foil and place each of the cups into a dish with hot tap water for 30 seconds
- \* The rubbing alcohol should turn green
- \* Now take the coffee filter and cut out (3) 1 inch wide strips so that they are as long as your glass cups are high.
- \* For each of your strips of coffee filter paper you are going to tape one end to the side of a pencil.
- \* Set the pencil across the top of the glass cups so that the bottom of the coffee filter paper just touches the rubbing alcohol solution.
- \* Now it's time to wait! After 1 hour you will see the leaf colors separate!

