**Magical color of food**

**Materials and equipment:** 4 beakers, burners, spoons, water, green beans, salt (NaCl), baking soda (NaHCO3), lime juice

**Procedure:** Boil 200 ml of water in 4 beakers (250 mL).

In a boiling water add:

In the first beaker: 3 teaspoons of kitchen salt and 20 g of green beans,

In the second beaker: 2 teaspoon of baking soda and 20 g of green beans,

In a third beaker: 4 teaspoons of lime juice and 20 g of green beans

In the fourth beaker: 20 g of green beans

Cook green beans for 5 minutes on a medium heat.

**Note down your observations during the experiments!**

Sketch:

Observation:

**Questions:**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the pigment that give beans their green color.
2. Why are pigments important in a plant life?
3. Why are pigments important in human life?
4. Why are plant pigments important to people?
5. Under what conditions would you cook green beans for your meal?
6. Which way of cooking can best preserve nutrients in vegetables

**Materials and equipment:** 4 beakers, burners, spoons, water, red cabbage, salt (NaCl), baking soda (NaHCO3), lime juice

**Procedure:** Boil 200 ml of water in 4 beakers (250 mL).

In a boiling water add:

In the first beaker: 3 teaspoons of kitchen salt and 20 g of red cabbage,

In the second beaker: half of teaspoon of baking soda and 20 g of red cabbage,

In a third beaker: 2 teaspoons of lime juice and 20 g of red cabbage

In the fourth beaker: 20 g of red cabbage

Cook cabbage for 5 minutes on a medium heat.

**Note down your observations during the experiments!**

Sketch:

Observation:

**Questions:**

1. Name some fruit and/or vegetables that contain anthocyanin.
2. Why does cooking vegetables in alcali conditions makes it soft and mushy?
3. What do you expect to happend if you add some lime juice in second beaker? Try to do it.
4. How to use the red cabbage (red cabbage juice) in teaching chemistry?