A Primer on George Washington Carver

George Washington Carver, who is credited as the "Father of the Peanut Industry", had the most humble of beginnings. Carver was born into slavery in the early 1860s.

When slavery was abolished, George and his brother were taken in by the family that had owned them, the Carvers. The couple raised the brothers as their own children, encouraging George to continue to pursue his intellectual interests.

Carver studied botany at Iowa State Agricultural College University, where he was the first African American student to enroll, and received his Bachelor's degree and later, a Master's degree in 1896. He was a faculty member at Iowa State University, as well.



After teaching at Iowa State University, Booker T. Washington invited Carver to lead the agriculture department at Tuskegee Institute. This is where he taught systematic crop rotation to prolong the life of the soil. Carver alternated cotton crops with sweet potatoes and peanuts, soybeans or other legumes. George Washington Carver became known throughout the south as the "farmer's best friend". His work on crop rotation and innovative products helped many farmers to survive and make a good living.



Carver found over 300 uses for the peanut including chili sauce, caramel, mayonnaise, and even coffee - and everyday products: glue, rubber, axle grease, insecticides, shaving cream, face powder, shampoo and

hand lotion to name a few!



The importance of Peanuts

A Primer on George Washington Carver continued



Carver was more than his inventive mind. His artwork was featured in the 1893 World's Fair. He advised President Theodore Roosevelt

on matters of agriculture. He worked with Mahatma Gandhi to help with growing crops in India. After his death Congress would name **January 5th as George Washington Carver Day** in his honor.

William Henry Johnson (1901 – 1970) was an American painter. After Johnson married a Danish textile artist, the couple lived in Scandinavia. There he was influenced by the strong folk art tradition. They moved to the United States in 1938. This painting by Johnson shows the Folk Art Style of painting. He framed the central figure of George Washington Carver with images of his laboratory equipment and other foods. To the right, Franklin Delano Roosevelt welcomes Carver to his advisory position with the Department of Agriculture in the 1940s.







Botany Lesson: Peanuts

So what are peanuts? Are they a nut? Actually, peanuts do not grow on trees like pecans or walnuts. Peanuts are edible seeds inside pods and are part of the Legume family that includes soy-beans, chickpeas and peas.

Peanuts grow in a botanically interesting way. First, farmers plant the specially grown peanut kernels from the previous year's crop. Next, Peanut seedlings rise out of the soil about 10 days after planting. They grow into a green oval-leafed plant about 18 inches tall.

Then the yellow flowers emerge on the lower part of the plant. When the flowers pollinate themselves, the petals fall off as the peanut ovary begins to form. The unusual ovary of the peanut plant, called a peg, enlarges and grows down and away from the plant forming a small stem which extends to the soil.



The peanut embryo is in the tip of the peg. The embryo turns horizontal to the soil surface and begins to mature taking the form of a peanut. The plant continues to grow and flower, eventually producing about 40 more peanut pods per plant.

From planting (after the last frost in April or May) to harvesting, the growing cycle of a peanut takes four to five months.



Let's Grow Something!

Just having plants growing in your living space can help to improve your mental health. Researchers found that people who live around nature feel much happier than those that don't.

Supplies:

Bag of raw (not roasted) peanuts Paper towels Spray bottle of water Quart size Ziplock bags Tape

- don't. Leaf Flower Stem Peg Peanut Roots
- Identify the parts of a peanut plant (see illustration)
- Shell several of the raw peanuts.
- Fold a paper towel in half and then in half again.
- Spray paper towel with water until damp.
 - Place paper towel into a quart-size Ziplock bag.
 - Place 3 or 4 peanuts in the baggie.
 - Tape the baggie to a window.

In a few days, roots and stems will sprout from the peanuts. The plant can get along without soil for a while because of the food stored in the seed.

If you would like to continue the activity after the plants begin to grow, place three of the peanut seedlings in paper cups filled with soil. Eventually they can be moved into a bigger pot or planted outdoors.

