

#### Aim

• To explain how George Washington Carver helped farmers to grow crops.

#### Success Criteria

- I can describe George Washington Carver's contribution to farming.
- I can identify what plants need to grow well.
- I can explain crop rotation.

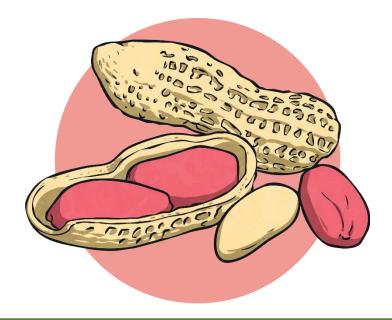
#### Peanuts!





What could you use peanuts for?

You might know a few, but try to think of your own ideas too. Be creative!

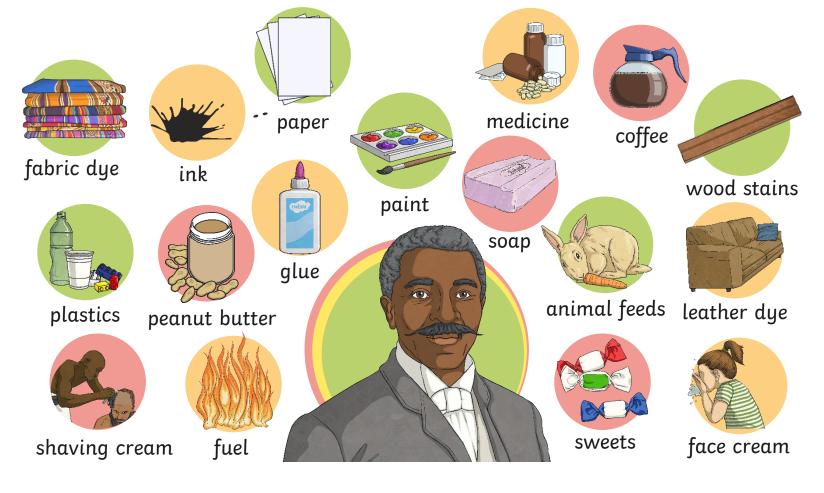




Remember, you could also use the oil or parts of the peanut plant – leaves, roots, flowers, etc.

# George Washington Carver

George Washington Carver invented over 100 uses for peanuts!
These included:



## George Washington Carver

George Washington Carver invented lots of uses for peanuts, but that wasn't his biggest contribution to the world.



George was born in the early 1860s (although we're not sure exactly when) on a farm in Missouri, USA. His parents, Mary and Giles, were slaves who were owned by the farmers, Susan and Moses Carver.

When he was just a week old, kidnappers took George, his sister and mother in the night, to sell them. His brother James was saved by the Carvers, who then also went out to find the rest of the family. They only managed to find baby George.

Slavery was made illegal in Missouri in 1865. George's father had died in an accident before he was born and his mother was still missing, so the Carvers decided to raise George and James as their own children. They taught them to read and write as well as explore their own interests; George was very interested in plants and animals at this time.

# George Washington Carver

George loved learning but he wasn't allowed to attend any of the schools near his home because they were for white children only.

George travelled between lots of cities so that he could find schools that would allow him to take classes. He eventually finished high school. After high school,

George took art classes and liked to draw and paint plants. It was here that a teacher suggested that he could become a botanist (a scientist who studies plants).

After being turned down by some colleges once they saw him, because they did not want black students to attend, George went to study for his botany degree in Iowa. He then took a masters degree and became a professor there too!

He later left to teach at a college for black students in Alabama, where he became the head of the **agricultural** department. It was here that George researched farming techniques, crops and soil to discover a technique to keep farmers' soil full of nutrients.

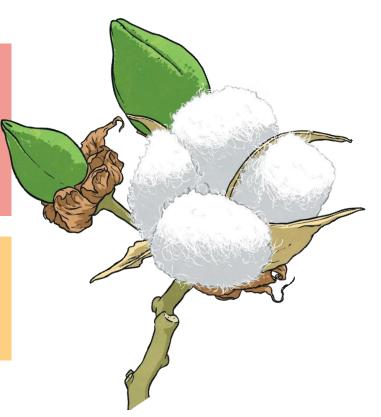
agriculture – The science of farming

#### The Problem with Cotton

One of the main crops grown in the area was cotton, but cotton crops can cause problems for farmers. George was interested in solving two problems:

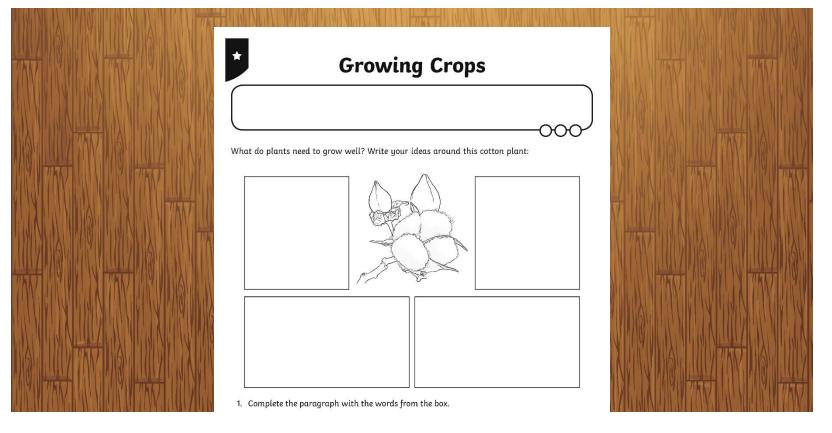
Growing cotton in the same field every year takes all the nutrients from the soil. Eventually, the plants can't grow there and the land becomes useless for growing crops.

There is an insect, called a boll weevil, which can destroy whole fields of cotton plants.



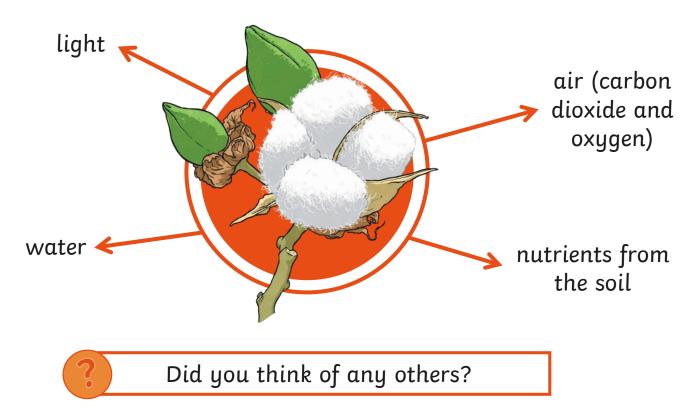
#### What Do Plants Need?

Discuss with your partner what you think plants need to grow well. Write your ideas around the picture of the cotton plant on your **Growing Crops Activity Sheet**.



#### What Do Plants Need?





George Washington Carver helped farmers to keep the nutrients in their soil, using a technique called crop rotation.

# George's Amazing Ideas



George discovered that if the farmers planted a crop with lots of protein, the soil nutrients the cotton plants needed would return.

He encouraged farmers to plant soya beans, sweet potatoes and peanut plants every other year to keep the soil healthy.



Crop rotation is the simple idea of growing one crop one year and a different one the next.

Use what you have learned so far to answer the first question on your **Growing Crops Activity Sheet.** 

# George's Amazing Ideas

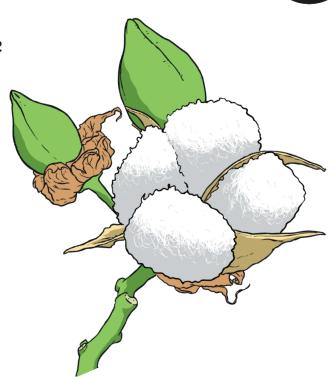


Crop rotation made the soil more nutrientrich. Even better, the boll weevils didn't like peanuts, so planting them stopped the weevils from returning to the fields to eat the cotton the year after.

Both cotton problems were solved!

#### However...

Farmers made lots of money from cotton plants, and nobody really wanted to buy peanuts, sweet potatoes or soya beans. Farmers didn't want to rotate their crops.





So, what do you think George did?

Answer questions 2 and 3 on your Growing Crops Activity Sheet.

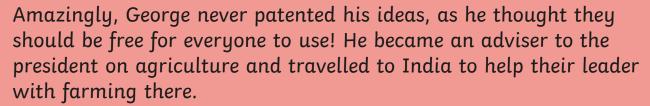
# George's Amazing Ideas



• George invented more than 100 uses for peanuts so that farmers would be encouraged to grow them and still make money.

• Peanuts became the sixth most commonly grown crop and farmers could continue to produce cotton.

Crop rotation is used by farmers all over the world today.



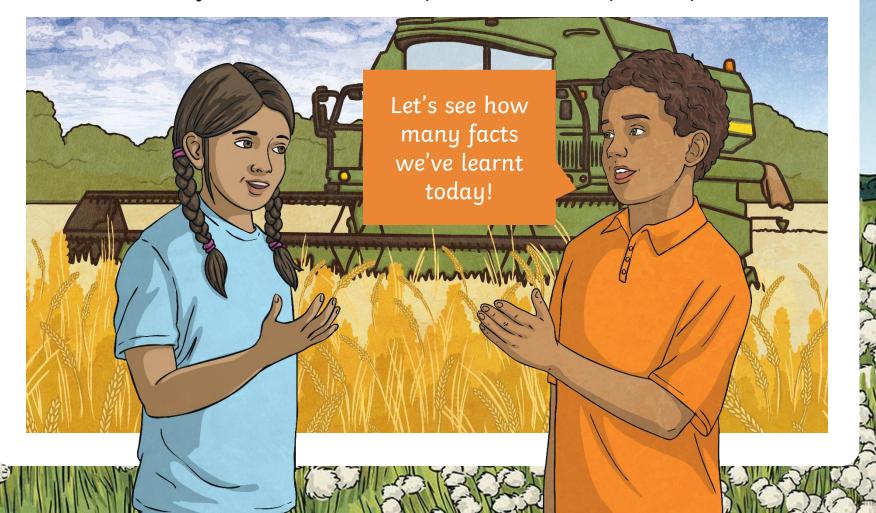
George Washington Carver is so well known for his work to help farmers that he has his own national day in the USA on the 5th January each year.

Complete the last question on your Growing Crops Activity Sheet.

patent – To register a design or idea as yours so that no one else is allowed to use or sell it.

### Tell Your Partner

In pairs, think of two facts about George Washington Carver and two facts about either crop rotation or the peanut plant.



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