

# POLLINATORS CLOSE UP



Ynes Mexia is a Mexican-American botanist who conducted field research throughout South America. She was forced to fund her own research travels, as it was not considered acceptable for women to do field research in the early 1900s. She is responsible for collecting 145,000 plant species, 500 of which were brand new species.

Go outside and see how many pollinators you can find! The most well known pollinators are butterflies and bees, but did you know that birds, bats, beetles, some small mammals and even some species of mosquito can help pollinate plants?

Pollinators are an essential part of a healthy and diverse ecosystem. Many families grew gardens during WWII to cope with rationing.

# DIY BIRDFEEDER



During WWII, DDT was used widely to control malaria and typhus among the soldiers. DDT is a potent insecticide that causes adverse environmental and health effects.

**Rachel Carson** wrote the book *Silent Spring* about the negative effects of chemical use on the environment, especially birds. This spurred an environmental movement that led to the creation of the U.S. Environmental Protection Agency.

Make a DIY bird feeder to support your backyard birds.

# DIY BIRDFEEDER

## Materials:

Peanut Butter

Bird Seed

A wooden block or something else durable

String

Use a knife to spread peanut butter on your birdfeeder. Use whatever you have laying around—a wooden block, an old toy—something durable. Put some bird feed onto a plate. Roll your feeder through the seed to get it to stick to the peanut butter. Attach a string and there you have it!

**NOTE:** Check out this website for tips on hanging your bird feeder. <https://www.allaboutbirds.org/news/where-to-put-your-bird-feeder/>

# ALL ABOUT SEEDS



Alice Augusta Ball was a brilliant young scientist who discovered one of the first effective treatments of leprosy using the oil from the chaulamoogra tree. She discovered this all before the age of 24 and it was the main treatment of leprosy for 30 years.

**Dissect a seed and  
plant your own  
edible flower!**

Many components of modern medicines come from plants.

# ALL ABOUT SEEDS

## DISSECT A BEAN SEED:

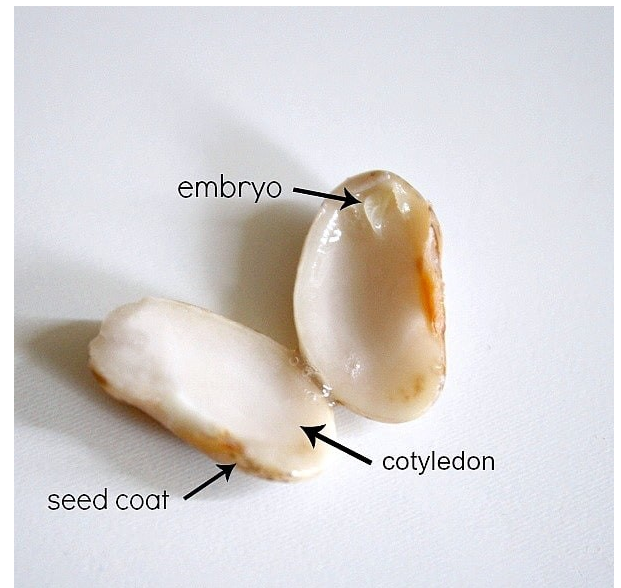
Soak a bean in water for 12-48 hours. Dry out the bean. Use a knife to separate the two halves of the bean. Use a magnifying glass to inspect the part of the bean.

## PLANT A SEED FROM VEGGIES AT HOME:

Did you know that you can grow your own vegetables using kitchen scraps from veggies you bought from the store? Check out this article for a comprehensive list. Pick one or five and try them out!

<https://www.diyncrafts.com/4732/repurpose/25-foods-can-re-grow-kitchen-scrap>

Some are more difficult than others, so be patient and keep trying!



# HISTORY OF CODING



Grace Hopper was one of the first three modern programmers who worked on Mark 1 during WWII – an early computer that marked the beginning of the modern computing era. This computer was 50 feet long, 8 feet tall and weighed 5 tons.

For at home coding practice, check out this website for a list of free coding websites for kids:

[https://  
mommypoppins.com/  
coding-kids-free-websites-  
teach-learn-programming](https://mommypoppins.com/coding-kids-free-websites-teach-learn-programming)

After the War, Grace went on to invent the a few of the first coding languages, such as COBOL.



# DIY HAND SANITIZER AND CLOROX WIPES

## Which alcohols can be used for sanitization?

The solution you use has to be at least 60% alcohol. Rubbing alcohols of 60% or more or drinking alcohols such as Everclear and Bacardi 151 have high enough alcohol content to kill viruses **BY THEMSELVES**. If you're going to dilute your solution with aloe gel, the percent alcohol content has to be around **91% or higher (or 180 proof or higher)**.

### DIY HAND SANITIZER

2/3 cup rubbing alcohol (**91%+**)  
1/3 aloe gel (store bought or from an aloe plant)

Mix together and store in a small container. Add essential oils as desired.

### DIY CLOROX WIPES

1 cup water  
1/4 cup rubbing alcohol (**91%+**)  
2 Tbsp. Dawn dish soap (only use Dawn)

Mix the above together. Soak washcloths (old shirts or cloths can work) in this solution and use! Wash cloths can be washed and reused.