

DARBY BOINGS
MEETS

Chrys and the Mums

BUZZY
COMBZ



DARBY
BOINGS

CHRYS
MUM

POPPY
MUM

BUTTON
MUM

WRITTEN &
CREATED BY
MICHELLE
BAIN



Gateway Greening



**PROACTIVE
PARENTS/GUARDIANS
GUIDE**

COMING UP ROSES

THROUGH PROGRAMS LIKE GATEWAY GREENING, COMMUNITIES ARE COMING TOGETHER TO GROW AND NURTURE URBAN AGRICULTURE LIKE NEVER BEFORE. YOU'RE NEVER TOO YOUNG TO START LEARNING ABOUT THE JOYS ABUNDANT IN EVERY GARDEN. YOUR CHILDREN ARE THE NEXT PIONEERS OF THE GREEN MOVEMENT, WITH A BOUNTIFUL FUTURE BLOOMING AHEAD OF THEM.

YOU CAN HELP THEM GROW A GREENER TOMORROW.

HI, PARENT/GUARDIAN!

I'M DARBY BOINGG AND THIS LITTLE BOOK WILL HELP YOU TEACH YOUR CHILD ABOUT GARDENING, GOOD NATURAL NUTRITION AND WHY PLANTS ARE IMPORTANT. WE CREATED THE BOOK DARBY BOINGG MEETS CHRYS AND THE MUMS FOR YOUR KIDS TO LEARN ABOUT PLANTS, VEGETABLES, FRUITS, POLLINATION AND HOW TO GROW GARDENS ALMOST ANYWHERE! JOIN THE GREEN TEAM AND HELP YOUR CHILD GET PLANTING!

- DARBY BOINGG

Disclaimer. This book provides general information about gardening, plants and health benefits. This information is not intended to be used for the diagnosis or treatment of a health problem or as a substitute for consulting a licensed health professional. Consult with a qualified physician or healthcare practitioner to discuss specific individual health needs and to professionally address personal nutritional or medical concerns.

OUR STORY, YOUR CHILDREN

DARBY BOINGG MEETS CHRYS AND THE MUMS

IS A BOOK THAT INTRODUCES YOUR KIDS TO THE JOYS OF GARDENING. WHEN DARBY'S PLANT LOOKS A LITTLE DROOPY, HE GOES TO SEE CHRYS AND THE MUMS AND LEARNS MORE THAN HE EXPECTED. YOUR KIDS WILL TOO!

YOU CAN HELP THEM LEARN ABOUT...

- PLANTS
- FRUITS AND VEGETABLES
- THE DIFFERENT PARTS OF PLANTS WE EAT
- HOW GARDENING BEGAN
- NUTRITION THE CHOOSEMYPLATE WAY
- HOW PLANTS GROW
- POLLINATION
- WHERE GARDENS GROW
- COMPOSTING
- T.L.P.C. (TENDER LOVING PLANT CARE)



A BRIEF HISTORY OF CORN



GARDENING BEGAN THOUSANDS OF YEARS AGO IN THE MIDDLE EAST. OVER IN NORTH AMERICA IN WHAT IS NOW MEXICO, 10,000 YEARS AGO FARMERS CHOSE WHICH SEEDS TO PLANT. THEY SAW THAT THE PLANTS THAT GREW WERE DIFFERENT. SOME WERE TALLER, SOME HAD LARGER KERNELS AND TASTED BETTER.

THIS IS HOW CORN CAME TO BE.

THE FARMERS KEPT SOME OF THE KERNELS FROM THE PLANTS THEY THOUGHT WERE BEST AND REPLANTED THOSE. THE MAIZE COBS BECAME BIGGER IN TIME, WITH BIGGER ROWS OF KERNELS. AFTER A LONG TIME, WE GOT MODERN MAIZE, OR THE CORN WE NOW KNOW SO WELL.



TYPES OF GARDENS

HUGELKULTUR

PLANTS GROWN FROM ROTTING WOOD PILES. RAISED GARDEN BEDS ARE FILLED WITH NUTRIENTS, ORGANIC MATERIALS AND AIR POCKETS.

CONTAINER GARDEN

GROWING PLANTS IN CONTAINERS, INSTEAD OF THE GROUND. PLASTIC OR CLAY POTS AND WINDOW BOXES MAKE THE BEST CONTAINERS.

WATER GARDEN

GARDENS WITH POOLS OR STREAMS FOR GROWING AQUATIC PLANTS.

NATIVE GARDEN

NATIVE GARDENS ARE GROWN IN THE WILD AS THEY WOULD IN NATURE. TREES, GRASS, MOSS AND SHRUBS GROW WITHOUT TENDING BY PEOPLE.

COMMUNITY GARDEN

A PIECE OF LAND GARDENED AND TENDED TO BY A GROUP OF PEOPLE.

TAKES ONE TO GROW ONE

SURE, A GARDEN IN FULL BLOOM LOOKS AND SMELLS NICE, BUT WHERE EXACTLY DO THOSE FLOWERS AND PLANTS COME FROM? IF YOUR CHILD IS LIKE MOST, HE OR SHE WILL WANT TO KNOW. HERE ARE SOME BASIC GARDEN FACTS TO SHARE...

SEEDS GO INTO THE GROUND, EITHER ON THEIR OWN OR WHEN PLANTED.

WATER AND WARMTH CAUSE THE SEED TO GROW, REACHING UP THROUGH THE GROUND.

PLANTS GET THE FOOD THEY NEED THROUGH SUNLIGHT. THIS IS CALLED PHOTOSYNTHESIS.

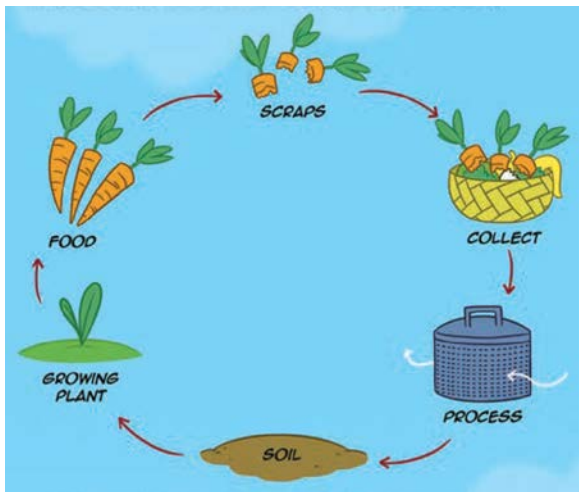
BUGS AND BIRDS POLLINATE THE PLANTS SO MORE PLANTS CAN GROW IN MORE PLACES.

THE PLANT GROWS SEEDS THAT WILL BECOME NEW FRUITS, VEGETABLES OR FLOWER PLANTS.

THE PLANT DROPS THE SEEDS THAT ENTER THE GROUND AND THE WHOLE CYCLE BEGINS AGAIN.

COMPOSTING: IT ALL COMES AROUND AGAIN

COMPOSTING TURNS ROTTING FOOD SCRAPS, DEAD FLOWERS AND CUT GRASS INTO NUTRIENT-RICH SOIL THAT HELPS GARDENS GROW.



BENEFITS OF COMPOSTING:

- ENERGIZES GARDEN SOIL
- HELPS SOME VEGETABLES FIGHT OFF PLANT DISEASES
- MAKES GARDEN FRUITS AND VEGGIES GROW BETTER
- ADDS MICRO-ORGANISMS AND GOOD BUGS INTO THE SOIL
- HELPS SOIL STAY MOIST

SOMETIMES TRASH IS MORE THAN JUST TRASH! TEACH YOUR CHILD HOW COMPOSTING BETTERS YOUR GARDEN'S ABILITY TO GROW HEALTHY PLANTS.

A GARDEN OF GOODNESS

YOUR CHILD MIGHT NOT KNOW HOW MUCH OF THEIR MEAL COULD COME STRAIGHT FROM THE GARDEN. HOMEGROWN FRUITS AND VEGGIES ARE PACKED WITH VITAMINS, MINERALS AND NATURAL GOODNESS.

CARROTS

CONTAINS VITAMIN A AND CAROTENE TO KEEP SKIN, EYES, HEART AND TEETH HEALTHY.

BROCCOLI

RICH IN CALCIUM, VITAMINS C AND A AND OTHER CANCER-PREVENTING MINERALS.

GREEN BEANS

A GOOD SOURCE OF VITAMIN C, FOLIC ACID, IRON AND POTASSIUM.

PEAS

LOADED WITH PROTEIN, B VITAMINS, VITAMINS C AND A, IRON, POTASSIUM, LUTEIN AND OTHER MINERALS.

AVOCADO

PACKED WITH HEALTHY FATS, POTASSIUM, VITAMINS AND MINERALS.

BEETS

CONTAINS NITRATES THAT CAN IMPROVE ATHLETIC PERFORMANCE.

SWEET POTATOES

RICH IN COMPLEX CARBS AND BETA CAROTENE.

GARLIC

CONTAINS AN ORGANIC COMPOUND KNOWN FOR FIGHTING INFECTIONS.

STRAWBERRIES

FIGHT CANCER AND AGING AND CONTAIN MANY VITAMINS, POTASSIUM AND PHOSPHORUS.

BLUEBERRIES

RICH IN HEART-PROTECTING ANTIOXIDANTS, VITAMINS AND MINERALS.

APPLES

HELP FIGHT INFECTION AND ARE RICH IN B VITAMINS, VITAMIN A AND POTASSIUM.

ORANGES

FULL OF VITAMIN B AND C, POTASSIUM AND FIBER, THEY HELP KEEP SKIN AND EYES HEALTHY.

CHERRIES

CAN CALM THE NERVOUS SYSTEM WITH THEIR MANY VITAMINS, POTASSIUM AND PHOSPHORUS.

GRAPES

RELAX THE BLOOD VESSELS AND ARE RICH IN VITAMIN A AND POTASSIUM.

PEACHES

RICH IN POTASSIUM, FLUORIDE AND IRON.

WATERMELON

CONTROL HEART RATE AND ARE FULL OF VITAMIN A, B VITAMINS AND POTASSIUM.

CHOOSEMYPLATE.GOV RECOMMENDS SMART PORTIONS OF VEGETABLES, FRUITS, PROTEIN, GRAINS AND DAIRY.



BUGGING OUT!

WITHOUT CERTAIN BUGS MAKING THEIR HOME THERE, YOUR GARDEN WOULDN'T STAND A BLOOMING CHANCE! BUGS CAN BE CREEPY, CRAWLY AND GROSS TO MOST PEOPLE, BUT YOU CAN TEACH YOUR CHILD THAT THERE ARE BOTH GOOD AND BAD BUGS FOR THE GARDEN.

BAD BUGS EAT AND DESTROY PLANTS AND FLOWERS. GOOD BUGS FEED ON THE BAD BUGS.

THE GOOD BUGS

BEEES: POLLINATE PLANTS.

WASPS: ATTACK BUGS THAT HARM PLANTS, LIKE GRUBS AND LARVAE.

EARTHWORMS: AERATE THE SOIL SO WATER CAN REACH PLANT ROOTS AND THEIR WASTE PROVIDES NUTRIENTS FOR THE PLANTS.

LADYBUGS: EAT APHIDS AND OTHER TINY PESTS.

DRAGONFLIES: EAT MOSQUITOES AND APHIDS.

SPIDERS: EAT A HUGE AMOUNT OF GARDEN PESTS, MORE THAN ALL THE OTHER GOOD BUGS COMBINED.

GROUND BEETLES: DEVOUR SLUGS AND SNAILS AND CLEAN UP THE GARDEN BY LOOKING UNDER LEAVES FOR INSECTS TO SNACK ON.

HOVER FLIES: LOOK LIKE BEEES BUT THEY'RE FLIES THAT EAT TONS OF APHIDS AND HELP POLLINATE FLOWERS.

BUTTERFLIES: POLLINATE PLANTS AND FLOWERS AND MAKE FLOWERY GARDENS LOOK PRETTIER.

OUCH: COMMON BUG BITES

HOW TO IDENTIFY COMMON BUG BITES ON YOUR KIDS

MOSQUITO

ITCHY, ROUND, RED OR PINK SKIN BUMP

SPIDER (NON-POISONOUS)

RED SKIN, SWELLING, PAIN AT THE SITE OF THE BITE

FLEA

SMALL, RED SKIN RASH THAT MAY ITCH AND BLEED, TEND TO BE IN CLUSTERS

BEE STING

RED BUMP WITH WHITE AROUND STING SITE
MAY ITCH AND FEEL HOT TO THE TOUCH

ANT BITES & STINGS

RED BUMPS AND SKIN RASH

Always talk to your doctor if you have any questions.

POLLINATION QUESTIONS & ANSWERS

Q: SO WHAT IS POLLINATION?

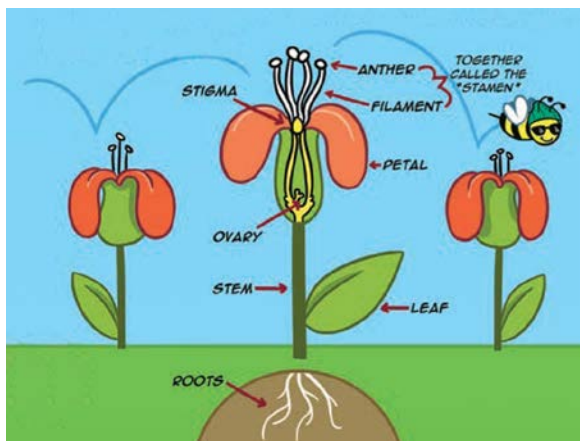
A: POLLINATION IS HOW PLANTS MAKE MORE PLANTS. THE MALE PARTS OF PLANTS MAKE POLLEN, WHICH GETS TO THE FEMALE PARTS OF OTHER PLANTS BY BEING CARRIED ON THE WIND OR BY A BUG OR BIRD. THE TINY GRAIN OF POLLEN TRAVELS DOWN THE PLANT AND JOINS WITH THE EGG CELL INSIDE TO FERTILIZE AND BECOME A SEED.

Q: WHAT ANIMALS POLLINATE PLANTS?

A: ANY ANIMAL CAN HELP CARRY POLLEN TO THE FEMALE PLANT. BEES, WASPS, BIRDS, BUTTERFLIES, BATS, MOTHS AND FLIES ARE THE MOST COMMON.

Q: HOW DOES A FLOWER ATTRACT ANIMALS?

A: FLOWERS CAN ATTRACT POLLINATORS WITH THEIR SWEET SMELL, THE MARKINGS ON THEIR PETALS, THEIR BRIGHT COLORS, THEIR SWEET NECTAR AND EVEN BY HAVING AREAS ON WHICH BUGS CAN LAND.



HEALTHY GARDEN, HEALTHY YOU!

YOU KNOW THAT EXERCISE AND GOOD HEALTH GO HAND IN HAND. YOU MAY NOT HAVE KNOWN THAT GARDENING COUNTS AS EXERCISE AND HAS MANY HEALTH BENEFITS FOR GROWNUPS AND KIDS.

- ♥ PUSHING A WHEELBARROW CAN BURN 27 CALORIES EVERY 10 MINUTES.
- ♥ WEEDING CAN BURN UP TO 157 CALORIES PER HOUR.
- ♥ PLANTING CAN USE UP TO 177 CALORIES IN AN HOUR.
- ♥ DIGGING WITH A SHOVEL CAN USE UP TO 197 CALORIES PER HOUR.
- ♥ EATING NATURAL FOODS FROM THE GARDEN IS MUCH MORE HEALTHY THAN EATING PROCESSED PACKAGED FOODS.
- ♥ GARDENING CAN EASE STRESS AND PUT YOU IN A BETTER MOOD.
- ♥ OUTDOOR GARDENING MEANS BREATHING FRESH AIR.

Flexibility

Joints

Heart

Bones

DIG IN!

GARDEN FUN FOR YOU AND YOUR CHILD

FRUIT SEED GARDEN

STEP 1: SAVE 8-10 FRUIT SEEDS FROM A LEMON, APPLE, ORANGE, GRAPEFRUIT OR LIME. FILL A SMALL DISH WITH WATER AND SOAK THE SEEDS FOR 1-2 DAYS.

STEP 2: FILL A PLANTING POT WITH SOIL.

STEP 3: BURY THE SEEDS ABOUT A ¼-INCH DEEP AND WATER THEM.

STEP 4: WATCH YOUR SEEDS FOR THE NEXT FEW WEEKS, KEEPING THE POT IN A SUNNY PLACE AND WATERING IT EVERY COUPLE OF DAYS. WATCH FOR YOUR PLANT TO BREAK THROUGH THE SOIL.

STEP 5: WHEN THE PLANT HAS OUTGROWN THE POT, CAREFULLY REPLANT IN A BIGGER POT OR OUTSIDE IN THE GARDEN.

PIZZA GARDEN

GROW THE INGREDIENTS YOU'LL USE TO MAKE A PIZZA!

STEP 1: DIVIDE AN AREA OF YOUR GARDEN INTO SEVEN SECTIONS. MARK THE SECTIONS WITH STICKS AND SMALL SIGNS.

STEP 2: PLANT DIFFERENT PIZZA VEGETABLE SEEDS IN THEIR OWN SECTIONS: ONIONS, GREEN PEPPER, RED PEPPER, TOMATO.

STEP 3: PLANT DIFFERENT PIZZA HERB SEEDS IN THEIR OWN SECTIONS: OREGANO, BASIL, PARSLEY.

STEP 4: WATER YOUR PIZZA GARDEN. WHEN THE PLANTS ARE FULLY GROWN, PICK THEM, WASH THEM AND USE THEM ON YOUR PIZZA!

RESOURCES

GATEWAY GREENING

<http://www.gatewaygreening.org>

THE NATIONAL GARDENING ASSOCIATION

<http://www.garden.org>

UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)

<http://www.usda.gov>

USDA CHOOSEMYPLATE.GOV

<http://www.choosemyplate.gov>

NATIONAL GARDENING ASSOCIATION: KIDS GARDENING

<http://www.kidsgardening.org>

GARDENING SUPPLIES AND SEEDS

<http://www.burpee.com>

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IT'S A GARDEN OUT THERE!

GETTING YOUR KIDS INTO GARDENS, FLOWERS, PLANTS, FRUITS AND VEGGIES CAN BE FUN AND REWARDING!

THIS GUIDE WILL HELP YOU TEACH YOUR CHILD ABOUT:

GARDENS

HEALTHY FOODS

POLLINATION

COMPOSTING

GOOD BUGS AND BAD BITES

AND MORE!

SO ROLL UP YOUR SLEEVES AND JOIN DARBY BOINGG AND HIS FRIENDS AS THEY GO GREEN IN THE BACKYARD TO LEARN ABOUT PLANTLIFE.

WRITTEN AND CREATED BY MICHELLE BAIN

ILLUSTRATED AND DESIGNED BY ANDREA HYON TAYLOR



KEEP THE PLANET HEALTHY! THIS BOOK WAS PRINTED ON RECYCLED PAPER!



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