

GROWING FOOD WITH LIMITED SPACE



BY THE FANTASTIC FOUR

PROBLEM

AS THE EARTH'S POPULATION INCREASES, IT IS BELIEVED THAT EVENTUALLY THERE WILL NOT BE ENOUGH LAND TO GROW THE AMOUNT OF FOOD THAT WILL BE NEEDED TO FEED PEOPLE AND LIVESTOCK.

WE EXPERIMENTED WITH VARIOUS METHODS OF GROWING FOOD (HYDROPONICS, REGROWTH FROM FOOD SCRAPS, VERTICAL, ETC.). NONE OF THESE NON-TRADITIONAL METHODS REQUIRE MUCH LAND.

PLAN

WE WANT TO INVESTIGATE HOW TO HELP OUR SCHOOL BY GROWING FOOD FOR THE SALAD BAR. WE ARE HOPEFUL THAT WE COULD

1. GROW ENOUGH LETTUCE FROM LETTUCE SCRAPS TO FEED OUR STUDENT BODY
2. GROW ENOUGH CELERY FROM CELERY SCRAPS TO FEED OUR STUDENT BODY
3. VERTICALLY GROW SOME OF THE HERBS USED TO FEED OUR STUDENT BODY
4. REDUCE OUR SCHOOLS COST FOR PURCHASING FOOD GROWN ELSEWHERE WHILE USING LESS AGRICULTURAL SPACE

WHAT WE DID AND WHAT WE BUILT

OUR MENTOR HELPED US LEARN HOW TO MAKE A WICK, A VERTICAL GARDEN, AND HOW TO REGROW FROM FOOD SCRAPS.

WE EXPERIMENTED AND JOTTED DOWN NOTES ABOUT OUR PLANTS.

WE CREATED WICK SYSTEMS WITH CLOTH AND A PLASTIC BOTTLE.

WE PUT CELERY, ONION AND LETTUCE IN A BOWL FULL OF WATER UNDER A SUN LIGHT.

WE INTERVIEWED OUR KITCHEN STAFF TO DETERMINE HOW MUCH WE NEEDED TO GROW.

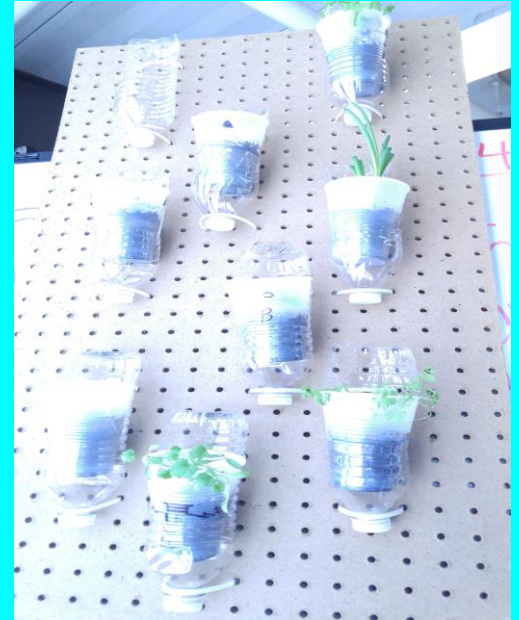
YOU CAN REUSE YOUR LETTUCE,
ONION AND CELERY SCRAPS TO
GROW NEW FOOD.



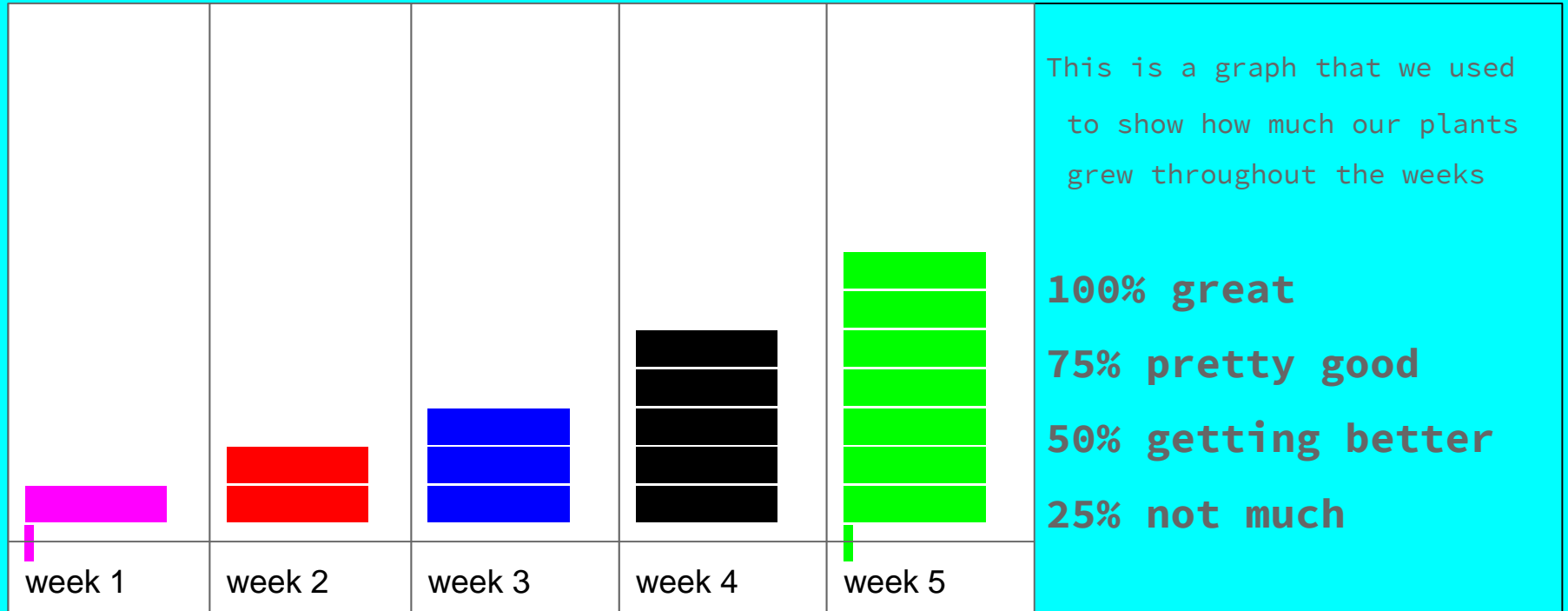
USING A PLASTIC BOTTLE AND A
PIECE OF CLOTH, YOU CAN CREATE
A HYDROPONIC WICK SYSTEM.



YOU CAN MAKE A VERTICAL
GARDEN FROM EMPTY WATER
BOTTLES AND A PIECE OF PEG
BOARD.



DATA- THE VERTICAL GARDEN, HYDROPONICS, AND REGROWING FROM SCRAPS ALL DID GREAT! WE GREW HERBS, ONIONS, CELERY, AND LETTUCE USING NONE TO LITTLE DIRT.



CONCLUSION

AFTER INTERVIEWING OUR KITCHEN STAFF, WE LEARNED THAT IF WE COULD PRODUCE 10% OF THE STRAWBERRIES AND LETTUCE WE USE, WE WOULD SAVE \$1,000 FOR OUR SCHOOL EVERY YEAR!

STRAWBERRY PLANTING

1. WE ARE NOW EXPERIMENTING WITH GROWING STRAWBERRIES FROM STRAWBERRIES
2. CUT A STRAWBERRY INTO THIN SECTIONS
3. PLACE STRAWBERRY PIECES IN DIRT AND COVER WITH A LITTLE BIT MORE DIRT
4. PLACE IN A SUNNY LOCATION, WATER, AND WAIT



<http://www.plantsonwalls.com/Articles.asp?ID=7>

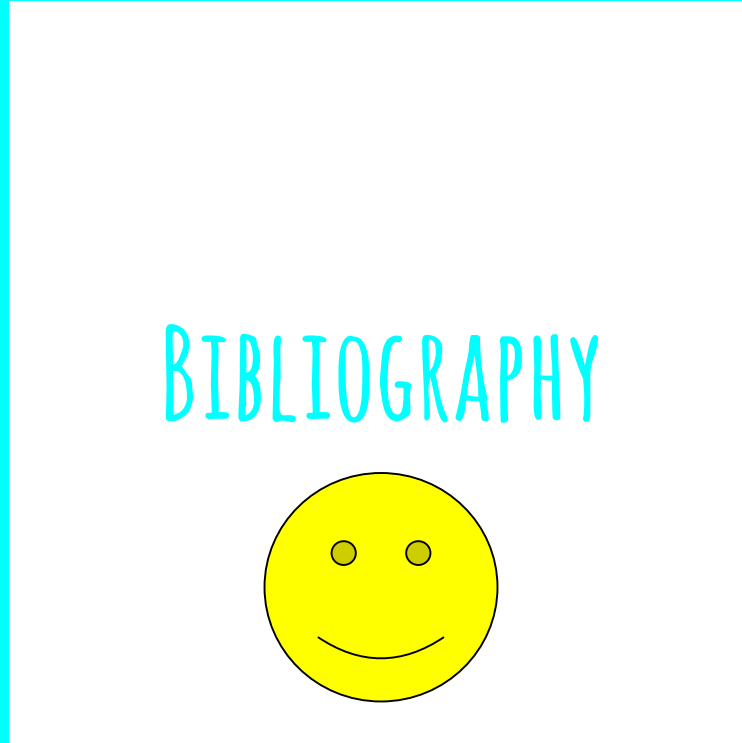
<http://www.epicgardening.com/hydroponics-for-kids/>

<http://strawberryplants.org/?s=buried+strawberry>

Expert
Mrs.Reynolds-
Gursch

yagrein.blogspot.com
en.wikipedia.org
homeguides.sfgate.com
spore.wikia.com

<http://www.almanac.com/plant/strawberries>



<https://www.youtube.com/watch?v=dx1blgsfNYI>

<http://www.lowtechmagazine.com/2010/03/make-your-own-lowtech-vertical-farm.html#more>

<http://www.bhg.com/gardening/design/styles/vertical-gardens/>