

**O'CONNELL COLLEGE PREPARATORY SCHOOL'S
OC GREEN TEAM...ADVISOR: Nina Corley
"ROOTED IN SUSTAINABILITY ON THE GALVESTON ISLAND AND IN THE GULF"**

THIS SCHOOL YEAR HAS MARKED THE 12TH YEAR ANNIVERSARY SINCE THE CREATION OF O'CONNELL'S ORIGINAL OC GREEN TEAM. WE HAVE EVOLVED, GROWN AND MADE MANY CHANGES OVER THE YEARS WHICH HAS ALLOWED FOR THIS YEAR'S PROJECT TEAM TO FOCUS OUR EMPHASIS ON THE PROMOTION OF A RECYCLING CULTURE IN OUR SCHOOL AND COMMUNITY, WHILE SIMULTANEOUSLY FINDING WAYS TO SAFELY RECYCLE THROUGHOUT OUR PROGRAMS AND BRING IN MORE SPEAKERS AND FIELD TRIP OPPORTUNITIES TO LEARN ABOUT CAREERS RELATED TO THE ENERGY INDUSTRY AND SHARE WHAT WE HAVE LEARNED WITH THE YOUNGER STUDENTS IN OUR AREA.

WE HAVE CONTINUED OUR COMMITMENT TO RECYCLE AND REUSE, NOT ONLY ARE WE RECYCLING BOTTLES AND CANS BUT WE CONTINUE TO COLLECT GROCERY BAGS FOR THE GROCERY STORES AND NEWSPAPERS FOR THE LOCAL HUMANE SOCIETY. WE CONTINUE OUR "SCIENCE BEHIND RECYCLING" PROGRAM TO INCLUDE THE INCORPORATION OF INFORMATION ON AND ACTUAL COLLECTION OF NURDLES ON LOCAL BEACHES. WE HAVE SHARED WHAT WE HAVE LEARNED WITH THE COMMUNITY, HELPING TO EDUCATE THE COMMUNITY NOT ONLY ABOUT THE SCIENCE BEHIND RECYCLING, NURDLE COLLECTIONS, PROVIDING A PLACE TO RECYCLE, INCORPORATING EDUCATION ABOUT THE DANGERS OF PLASTICS IN OUR OCEAN AND CLIMATE CHANGE IN OUR AREA, SHOWING WHAT THEY CAN DO TO MAKE A DIFFERENCE IN OUR COMMUNITY AND OUR WORLD. WE HAVE ALSO CONTINUED TO PROVIDING RECYCLING PICK UP WITHIN OUR SCHOOL AND COMMUNITY THROUGH OUR RELATIONSHIP WITH THE GALVESTON'S OWN FARMER'S MARKET, AS WELL AS ADDED COMMUNITY EVENTS SUCH AS MASS BEACH CLEANUPS. WE HAVE PROMOTED AND EXPANDED THE IDEA OF URBAN GARDENING ON THE ISLAND,. EACH OF THE ACTIVITIES WERE PROCEEDED BY THE GREEN TEAM PARTICIPATING IN LEARNING ACTIVITIES , FIELD TRIPS AND VIRTUAL FIELD TRIPS TO BUILD OUR FOUNDATION OF KNOWLEDGE TO ENABLE US TO SHARE WHAT WE HAD LEARNED WITH OUR COMMUNITY, BOTH WITHIN SCHOOL AND BEYOND OUR WALLS TO REACH OUR COMMUNITY AND THOSE VISITING FOR THE EVENTS. HELPED WITH FOOD DISTRIBUTION MONTHLY FOR THE COUNTY FOODBANK. DUE TO ROOF AND FENCE CONSTRUCTION WE HAVE HAD TO LIMIT SOME OF OUR GARDENING ACTIVITIES THIS YEAR, SO WE HAVE MOVED THAT FOCUS TOWARD MORE OUTREACH AT OTHER SCHOOLS WORKING WITH 8TH GRADE STUDENTS IN OUR AREA FOR THIS SCHOOL YEAR. .

PROJECT RECYCLING GOALS:

- TO STRENGTHEN A SCHOOL-WIDE CULTURE OF RECYCLING BY EXPANDING ACCESS TO RECYCLING THROUGH ADDITIONAL AND NEWLY DESIGNATED COLLECTION BINS, INCREASING PARTICIPATION AND BUY-IN FROM STUDENTS AND STAFF, AND ENSURING ALL RECYCLING EFFORTS FOLLOW ESTABLISHED SAFETY PROTOCOLS FOR COLLECTION AND TRANSPORTATION.



ACTIVITIES AND TASKS

- OBTAINED ADMINISTRATIVE APPROVAL FROM THE PRINCIPAL AND SCHOOL BOARD
- RECRUITED STUDENTS TO JOIN THE OC GREEN TEAM
- BUILT FOUNDATIONAL KNOWLEDGE THROUGH INSTRUCTION ON THE SCIENCE OF RECYCLING, ENERGY SOURCES, AND CLIMATE CHANGE TO PREPARE STUDENTS TO EDUCATE OTHERS
- PARTICIPATED IN FIELD TRIPS, JOB FAIRS, AND VIRTUAL SESSIONS EXPLORING ENERGY AND STEM CAREERS, INCLUDING:
 - OCEAN STAR DRILLING RIG MUSEUM AND ENERGY JOB FAIR
 - ZOOM MEETINGS WITH A FORMER NASA ENGINEER AND AMERICAN CHEMICAL SOCIETY REPRESENTATIVE
 - NAVY WEEK GUEST SPEAKERS ARE SCHEDULED
 - UNIVERSITY OF TEXAS MEDICAL BRANCH SPEAKERS ON SUN SAFETY AND MEDICAL CAREERS
- ATTENDED OFFSHORE ENERGY CAREER EXPOS TO EXPLORE OFFSHORE ENERGY CAREERS
- ASSIGNED STUDENT LEADERSHIP ROLES FOR RECYCLING MONITORING, SAFETY CHECKS, AND MATERIAL-SPECIFIC COLLECTION AND TRANSPORT
- SECURED NEW RECYCLING BINS THROUGH THE PEPSICO RECYCLE RALLY
- EXPANDED RECYCLING ACCESS BY PLACING BINS ACROSS CAMPUS (CLASSROOMS, CAFETERIA, GYM, HALLWAYS, OUTDOOR AREAS, GARDEN) FOR BOTTLES, CANS, PAPER, K-CUPS, AND COMPOST
- DESIGNED AND INSTALLED EDUCATIONAL SIGNAGE TO PROMOTE PROPER RECYCLING
- LEARNED ABOUT NURDLES, CONDUCTED BEACH COLLECTIONS, AND SHARED FINDINGS WITH THE COMMUNITY
- CREATED RECYCLING EDUCATION DISPLAYS, POSTERS, DOOR DECORATIONS, AND DISPLAY CASES
- STAFFED DISPLAYS DURING SEVERAL OPEN HOUSES TO EXPLAIN THE SCIENCE AND IMPORTANCE OF RECYCLING
- COLLECTED AND TRANSPORTED RECYCLABLES TO APPROPRIATE FACILITIES FOLLOWING SAFETY PROTOCOLS
- SENT THANK-YOU NOTES TO GUEST SPEAKERS AND COMMUNITY PARTNERS



• DESIGNED RECYCLING POSTERS, DISPLAYS, AND DISPLAY CASES TO PROMOTE RECYCLING AND ENERGY EDUCATION. PROJECTS WERE INTEGRATED WITH OUR OPEN HOUSE DEMONSTRATIONS AND MIDDLE SCHOOL VISITS, EMPHASIZING CARE FOR SELF AND THE ENVIRONMENT. STUDENTS ALSO CREATED VIDEO ADVERTISEMENTS HIGHLIGHTING ALTERNATIVE-FUEL VEHICLES AND PRESENTED PROJECTS RELATED TO ENERGY ON PUBLIC LANDS.

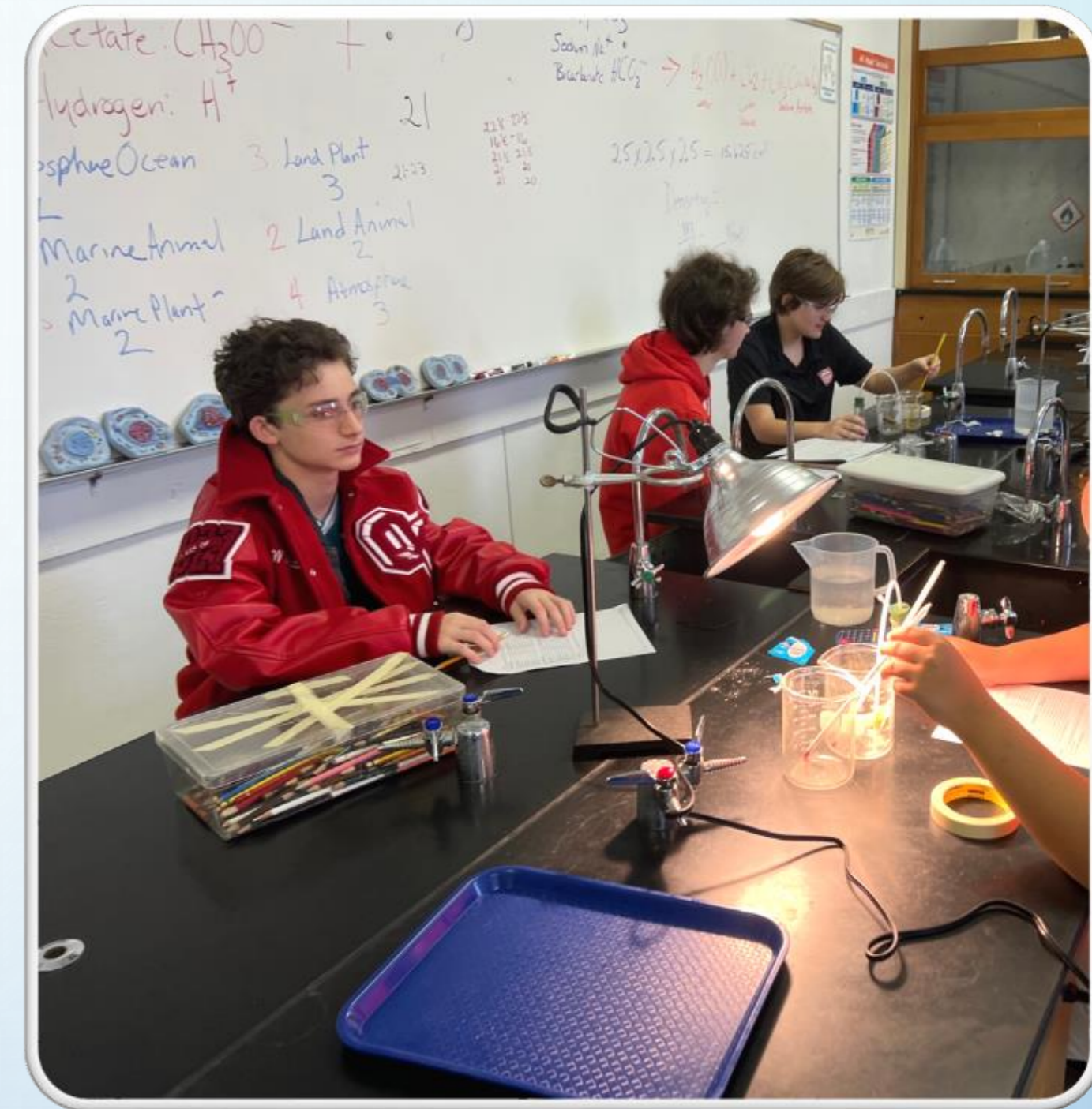
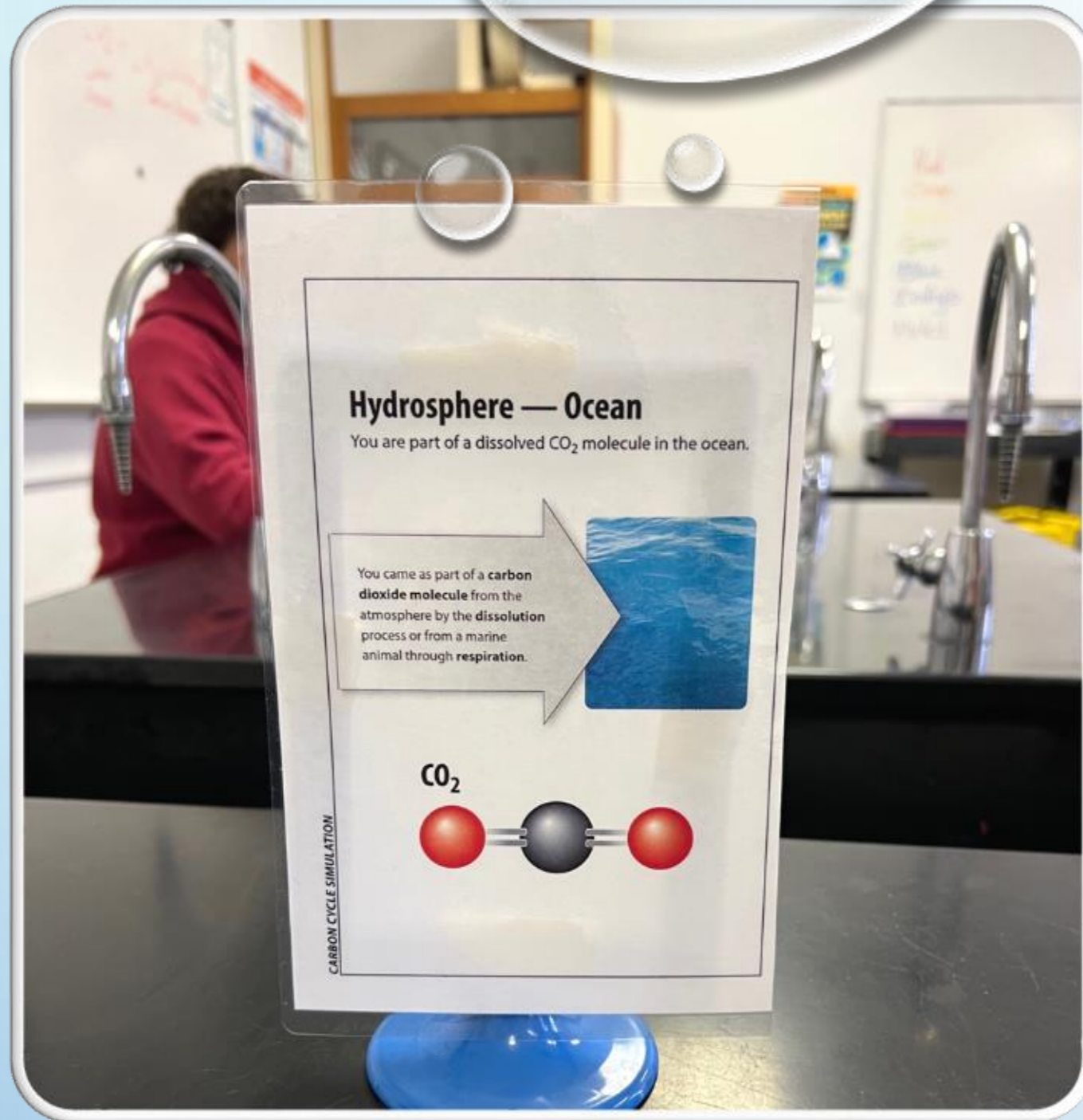




COMMUNITY RECYCLING GOALS

- TO EDUCATE THE COMMUNITY ABOUT THE SCIENCE OF RECYCLING, THE IMPACT OF NURDLES ON LOCAL BEACHES, AND PRACTICAL WAYS TO INCREASE RECYCLING PARTICIPATION . STUDENTS SHARED HANDS-ON LEARNING ACTIVITIES DURING OPEN HOUSE AND DURING 8TH GRADE VISITS.
- FOOD DISTRIBUTION GALVESTON COUNTY





LEARNING ABOUT ENERGY AND THE CARBON CYCLE

**EXPLORING ENERGY-RELATED
CAREER OPPORTUNITIES
STUDENTS PARTICIPATED
IN JOB FAIRS, INFORMATIONAL
TALKS, AND ONLINE
RESEARCH TO EXPLORE
CAREERS IN THE ENERGY AND
STEM FIELD
FIELD TRIPS**



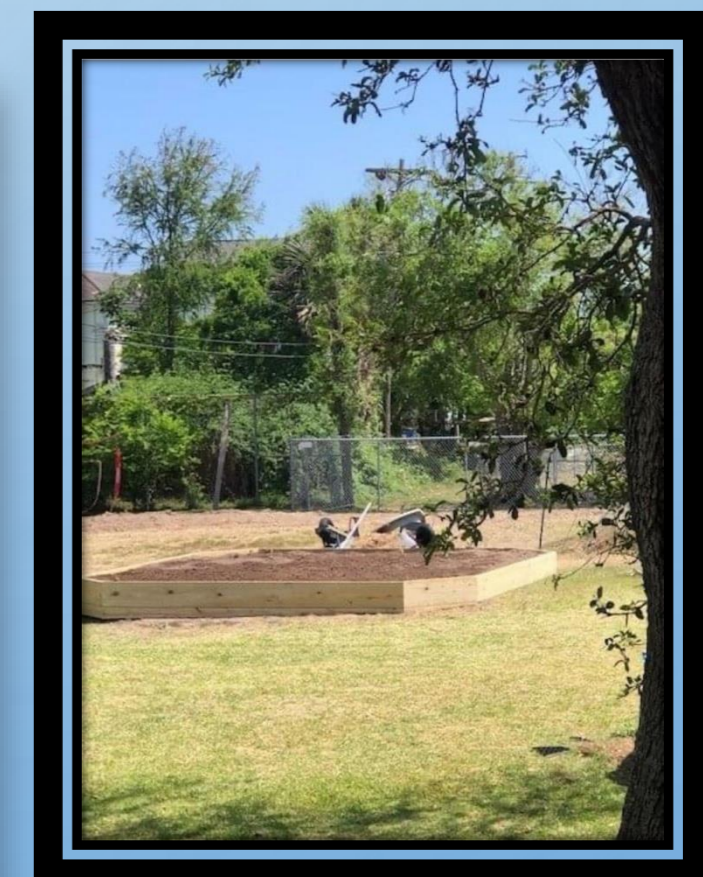
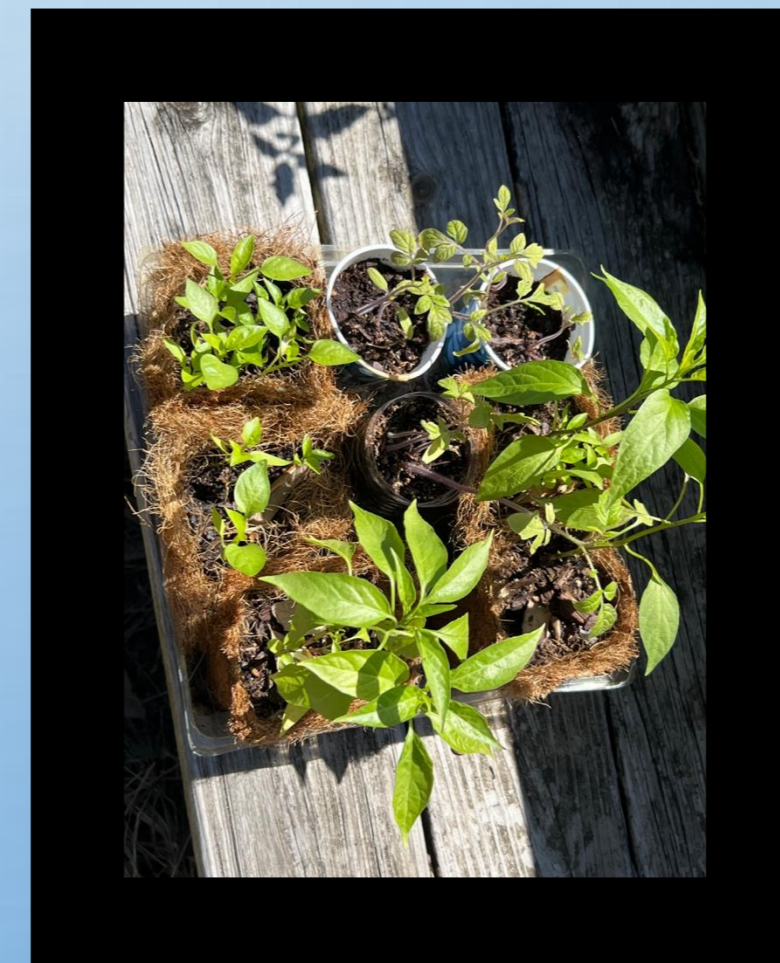
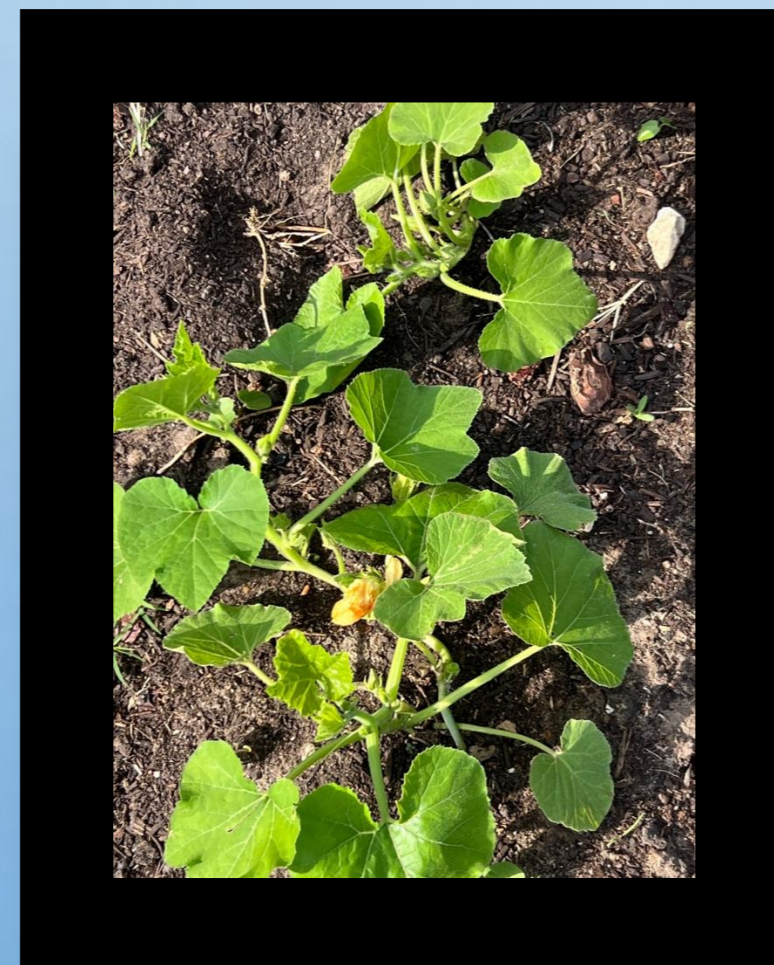
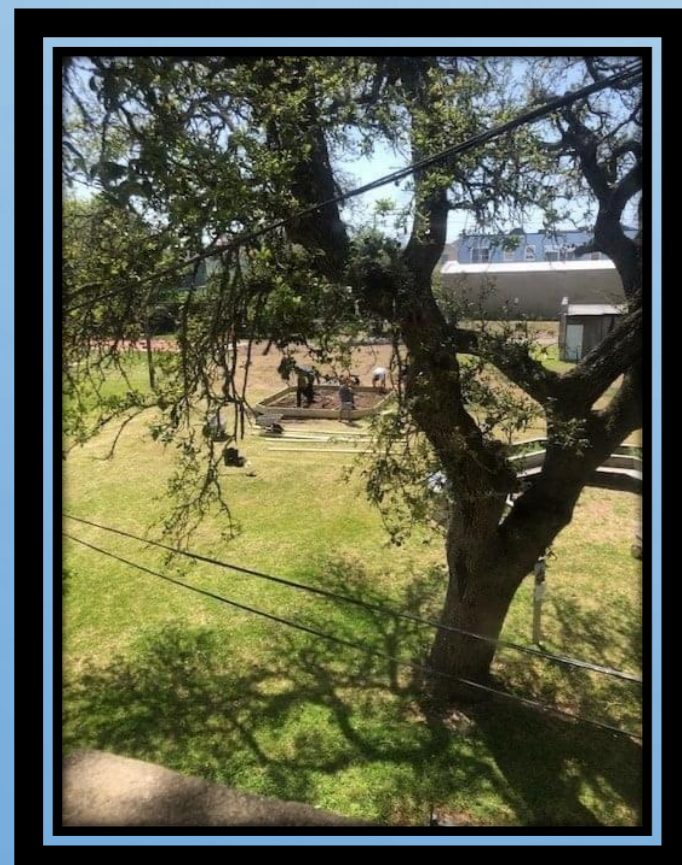
GARDEN GOALS



Gardening was limited this year due to school construction but we did continue research.



Researching the best urban gardening techniques and crops to grow on the island Sharing what we have learned about gardening on the island especially with our research on soils done to put in the new raised garden area.



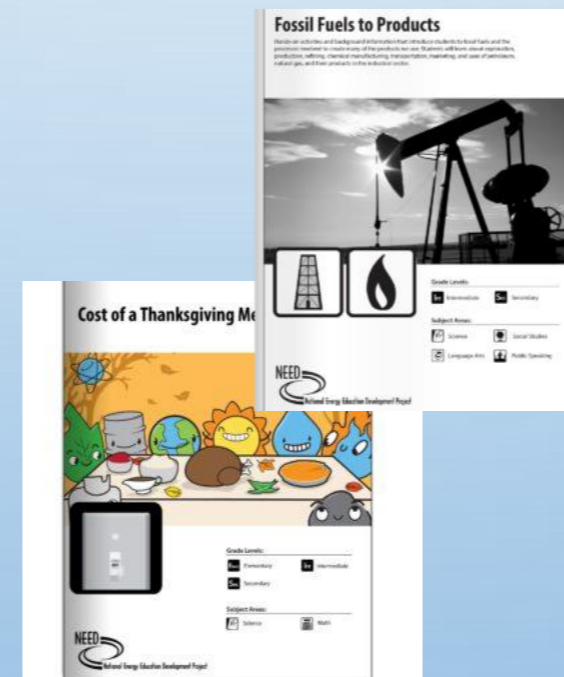
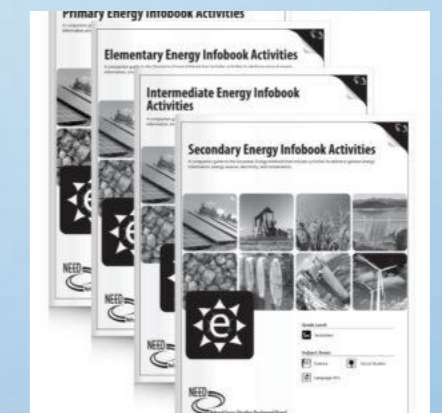
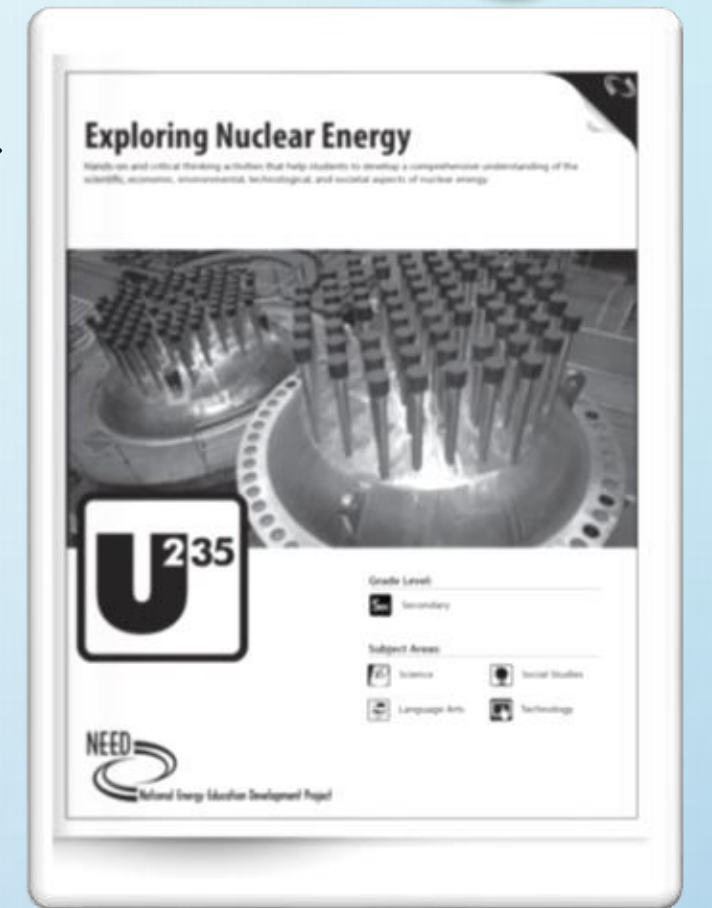
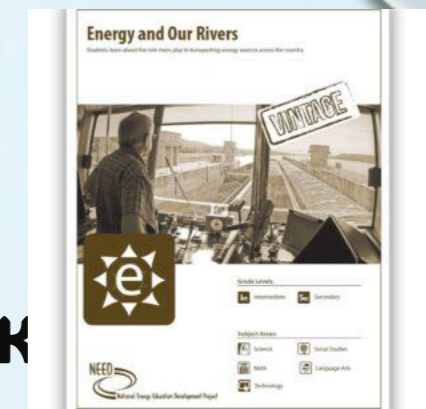
ACTIVITIES AND TASKS

- RESEARCH URBAN GARDENING TECHNIQUES TO SEE INVESTIGATE WILL WORK BEST ON THE ISLAND
- TRYING OUT THE RESEARCHED GARDENING METHODS TESTING THEM TO SEE WHICH WORK BEST IN OUR SCHOOL GARDEN.
- TESTING OF SOIL WITH THE AGRICULTURE EXTENSION AGENCY AND TEXAS A&M TO ADD SOIL TO NEW RAISED GARDEN AREA
- MASTER GARDENERS AND LOCAL FARMERS VISITING IN ORDER TO SHARE KNOWLEDGE AND HELP EVALUATE THE GARDEN
- GATHERED ASHES FROM COMMUNITY CAMPFIRES, USING THEM TO ADJUST THE PH OF THE GARDENS SOIL
- DESIGNED COOKING CLASSES THAT INCLUDED URBAN FARMING TECHNIQUES AND TAUGHT ATTENDEES HOW TO PREPARE THE FOOD GROWN
- USING SOLAR OVENS TO PREPARE PRODUCE GROWN IN THE GARDEN
- SENT HOME PRODUCE WITH STUDENTS IN NEED OF FOOD
- MAKING SUN HATS FROM NEWSPAPERS AND SHARING HAT MAKING TECHNIQUES WHILE STUDYING SUN SAFETY
- DISTRIBUTED FOOD TO THOSE IN NEED IN CONJUNCTION WITH THE LOCAL FOOD BANK AND CATHOLIC CHARITIES
- SHARED INFORMATION AT THE OPEN HOUSE AND AT FOOD DISTRIBUTION
- PROMOTED MORE CLASSES USING THE GARDENING SPACE WITH OUR MUSIC IN THE GARDEN
- WROTE PIGGY BACK CHRISTMAS SONGS FEATURING DIFFERENT SOURCES OF ENERGY

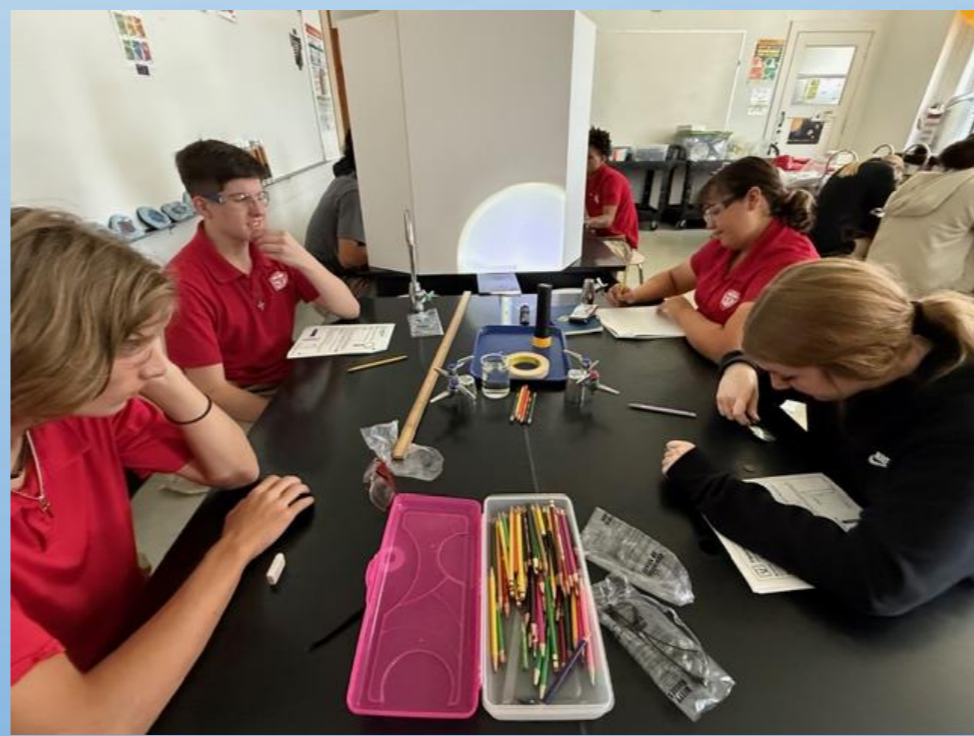
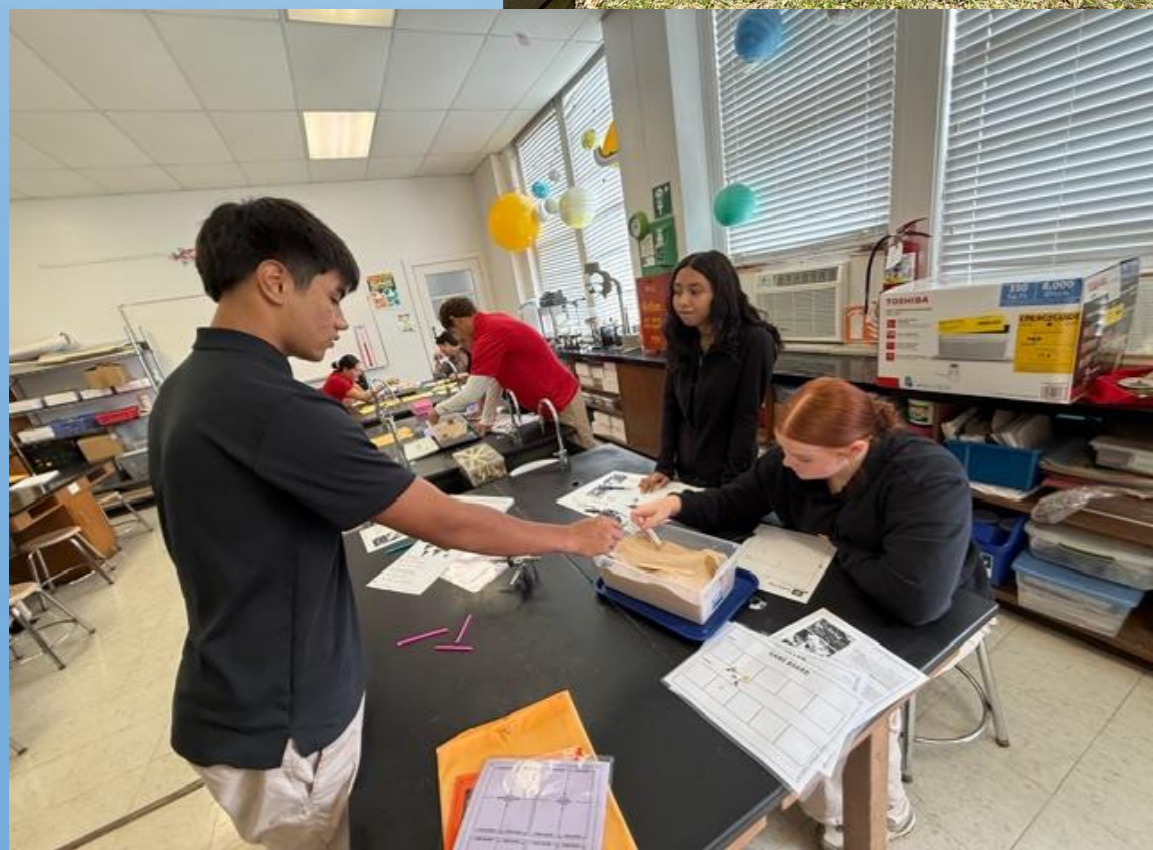
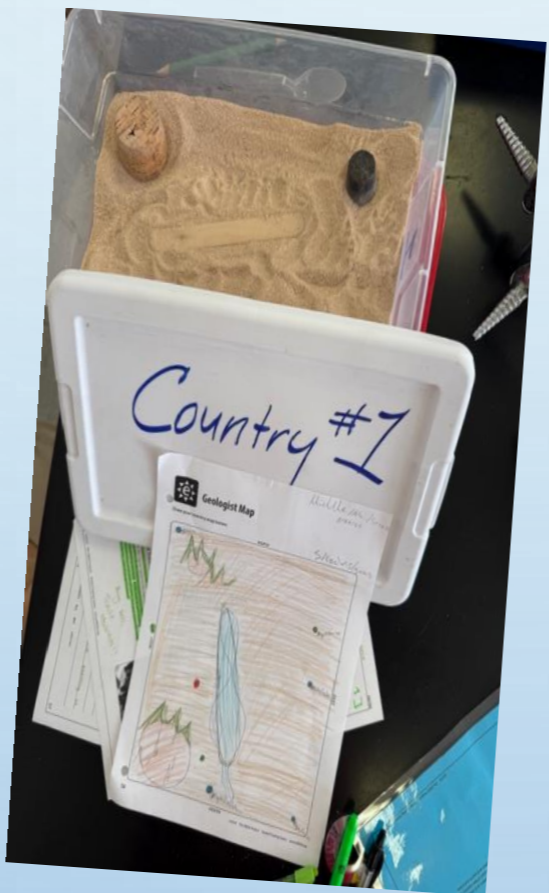
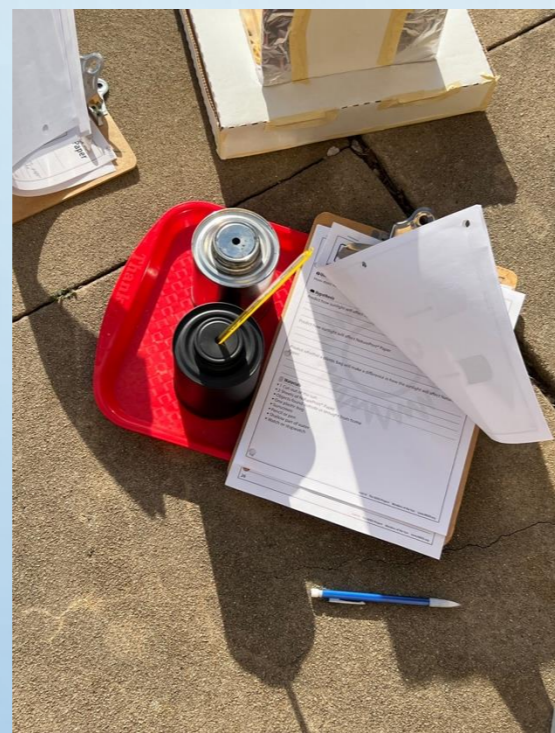


ENERGY CONTENT

- **NEED'S :** SCIENCE OF ENERGY, FOSSIL FUELS TO PRODUCTS, EXPLORING OIL AND GAS, SECONDARY ENERGY INFORMATION BOOK EXPLORING CLIMATE SCIENCE, ENERGY ENIGMA, EXPLORING NUCLEAR ENERGY, EXPLORING PHOTOVOLTAICS, H2 EDUCATE, TRANSPORTATION FUELS INFORMATION BOOK, TRANSPORTATION FUELS ENIGMA, TRANSPORTATION TRIO, ENERGY WORKS, THERMODYNAMICS, EXPLORING OFFSHORE WIND ENERGY , ENERGY ON PUBLIC LANDS, GLOBAL TRADING, ENERGY ON THE MOVE. COST OF A THANKSGIVING MEAL, COST OF CHRISTMAS SHOPPING, ENERGY GAMES AND ICEBREAKERS
- **ENERGY WEBSITES LINKED TO WWW.NEED.ORG WWW.SWITCHENERGY.ORG ENERGY4ME.ORG**
- **PAMPHLETS AND POSTERS FROM PEPSICO RECYCLE RALLY, [HTTPS://PEPSICORECYCLING.COM](https://PEPSICORECYCLING.COM)**
- **INFORMATION FROM THE AMERICAN CHEMICAL SOCIETY. WWW.ACS.ORG AND VIRTUAL SPEAKERS THROUGH THEIR HIGH SCHOOL CHEMISTRY CLUB**
- **PE3 BOOK FROM OFFSHORE ENERGY CENTER AS WELL AS THE KNOWLEDGE BOX AND PLAYING WITH PETROLEUM BOX**
- **ENERGY4ME CURRICULUM FROM THE SOCIETY OF PETROLEUM ENGINEERS**
- **AGRICULTURE EXTENSION AGENCY**
- **NASA**
- **TEXAS A&M**
- **JUNIOR MASTER GARDENER**
- **NURDLEPATROL.ORG**
- **KITCHEN CHICK**
- **HEB RECYCLING IN COMMUNITY**



LEARNING ACTIVITIES





LEARNING ACTIVITIES



STUDENT LEADERSHIP

- 1 STUDENT SERVED AS LIAISON WITH THE PRINCIPAL AND FACULTY, ADDRESSING RECYCLING QUESTIONS, COORDINATING EARLY PICKUPS WHEN NEEDED, AND ENSURING COMPLIANCE WITH
- SCHOOL SAFETY REGULATIONS
- 6 STUDENTS MONITORED RECYCLING BINS IN HIGH-TRAFFIC AREAS AND ENSURED PROPER DAILY SETUP
- 2 STUDENTS COLLECTED PLASTIC BOTTLES AND CANS AT LEAST TWICE WEEKLY, OR AS BINS FILLED
- 2 STUDENTS COLLECTED RECYCLED PAPER AND DELIVERED IT TO RECYCLING FACILITIES, AND TRANSPORTED NEWSPAPERS TO THE GALVESTON COUNTY HUMANE SOCIETY
- 2 STUDENTS TRANSPORTED PLASTIC BOTTLES AND ALUMINUM CANS TO APPROPRIATE RECYCLING FACILITIES
- 3 STUDENTS DESIGNED, PRINTED, LAMINATED, AND INSTALLED SIGNAGE PROMOTING RECYCLING AND ENERGY AWARENESS ACROSS CAMPUS
- 4 STUDENTS MANAGED DISPLAY CASES AND EDUCATIONAL EXHIBITS
- 5 STUDENTS STAFFED INFORMATION TABLES AND MONITORED RECYCLING BINS DURING OPEN HOUSE AND ATHLETIC EVENTS
- 2 STUDENTS COORDINATED COMMUNICATION WITH GALVESTON'S OWN FARMERS MARKET TO SCHEDULE BOOTHS AND DEMONSTRATIONS AND AT OPEN HOUSES
- 6 STUDENTS STAFFED RECYCLING COLLECTION AT THE FARMERS MARKET AND TRANSPORTED MATERIALS WHILE FOLLOWING SAFETY PROTOCOLS
- 2 STUDENTS COORDINATED COMMUNITY OUTREACH EVENTS
- 4 STUDENTS LED NURDLE PATROL EDUCATION AND COLLECTION EFFORTS
- 2 STUDENTS DESIGNED AND IMPLEMENTED ELEMENTARY SCHOOL VISITS AND MIDDLE SCHOOL VISITS
- 4 STUDENTS MAINTAINED THE GARDEN DURING HOLIDAYS AND SCHOOL BREAKS (CONSTRUCTION PART OF YEAR RESTRICTED USE)
- 2 STUDENTS MANAGED GROCERY BAG RECYCLING COLLECTION AND DELIVERY



EVALUATION

We evaluated our outcome by keeping track of the amount of recycling and also doing spot checks of classroom and various cans around campus to see how many possibly recyclable items were being put into the regular trash vs how much was being recycled

Students made a questionnaire that was sent to students and faculty and staff which showed the majority of the people on campus were invested in recycling on our campus

Students created a questionnaire on the Farmer's Market Facebook page to receive feedback from the community on the opportunity to have their recycling collected at the Farmer's Market and the reaction to the science behind recycling presentations at the booth at the Farmer's Market

Students made questionnaires that were filled out at the end of in person and virtual presentations to evaluate the information learned and to determine any changes that should be made to future presentations.

Questionnaires about Career choices after career research and presentation

Pre and Post Test were used with all the NEED curriculum activities

HOURS SPENT WORKING ON PROJECTS

Approximately 1550 hours collectively Recycling at School , Galveston's Own Farmer's Market, Delivering recycling , Nurdle patrol gathering, Community Events Research and working in the Garden and preparation of food and developing cooking classes and other outreach activities done with younger children. Demonstrations at open houses and visits to other schools and events., preparing for school visitors and presentations.

14 Student Coordinators this year , 3 from each class and 2 extra.