STEAMing Up the Library

Tina Coffey
@elemitrt
Roanoke County Schools

ITRT

Instructional Technology Resource Teacher

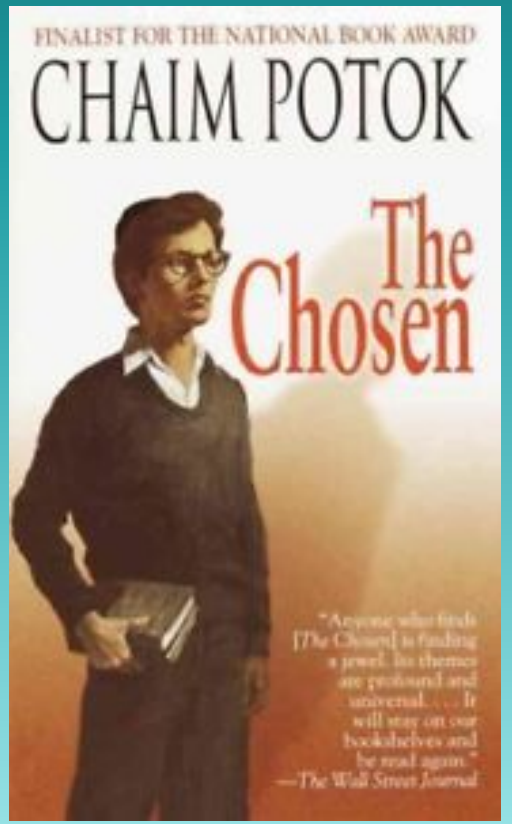
www.LearningCollaboratory.com

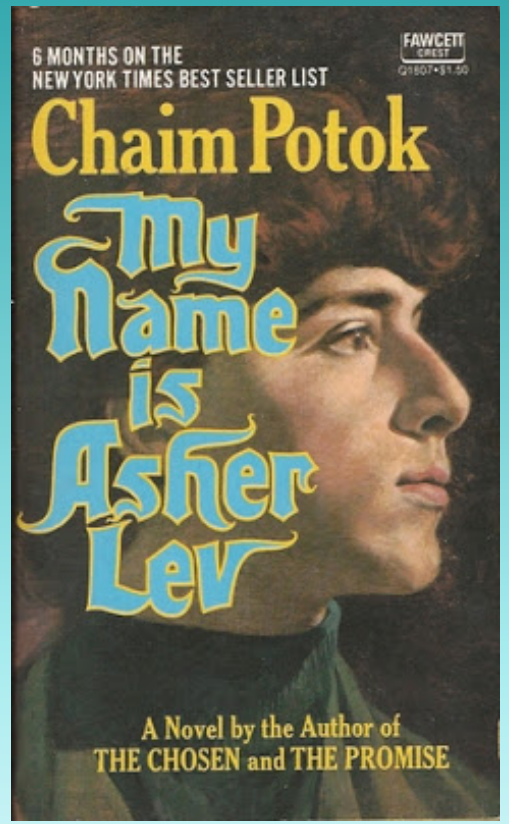
WORLD BOOK
WORLD BOOK
WORLD BOOK

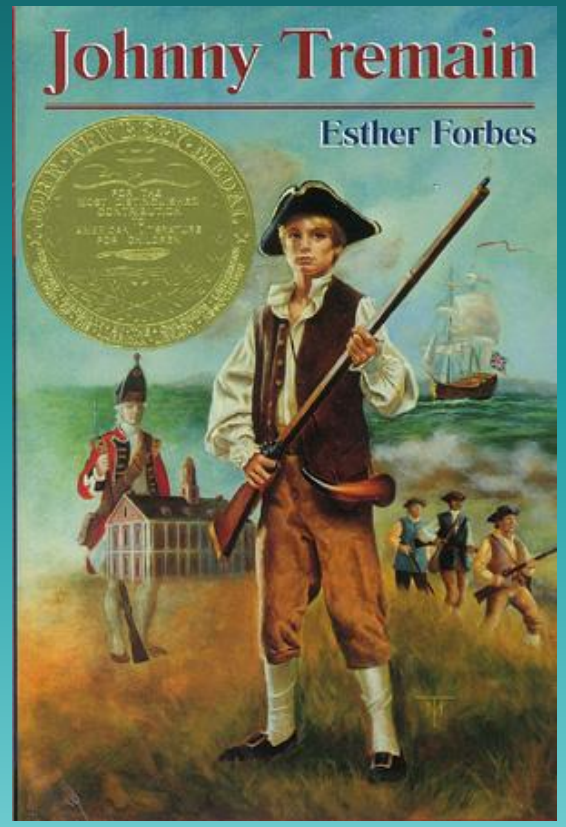
DURAN
DURAN
E.C.E

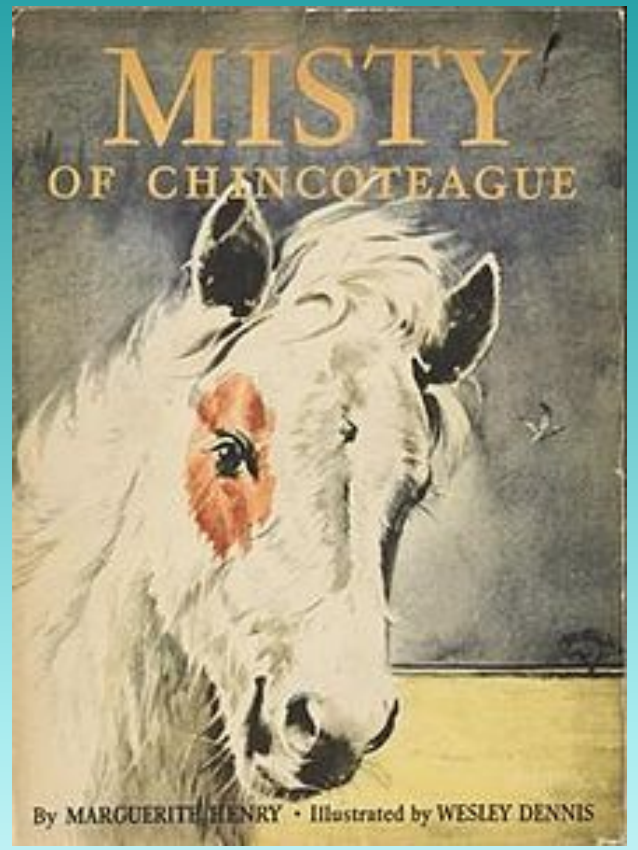
INSERT
FILM
FILM
ADVANCE
SINGER
Graflex
STUDY MATE

LPs


FINALIST FOR THE NATIONAL BOOK AWARD
CHAIM POTOK
The Chosen


6 MONTHS ON THE
NEW YORK TIMES BEST SELLER LIST
FAWCETT
Chaim Potok
My Name is Asher Lev
A Novel by the Author of
THE CHOSEN and THE PROMISE


Johnny Tremain
Esther Forbes


MISTY
OF CHINCOTEAGUE
By MARGUERITE HENRY • Illustrated by WESLEY DENNIS

Tech

Library spaces ARE changing

These constants are still true...

Safe Space to Learn

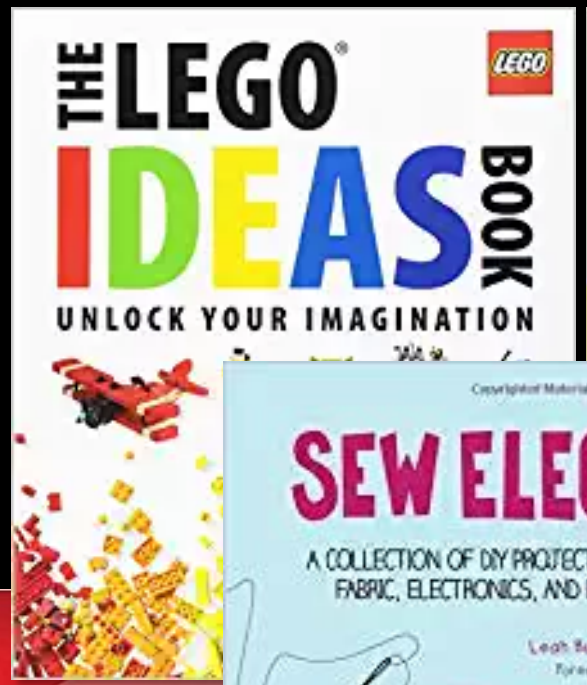
Libraries provide access for ALL.

School

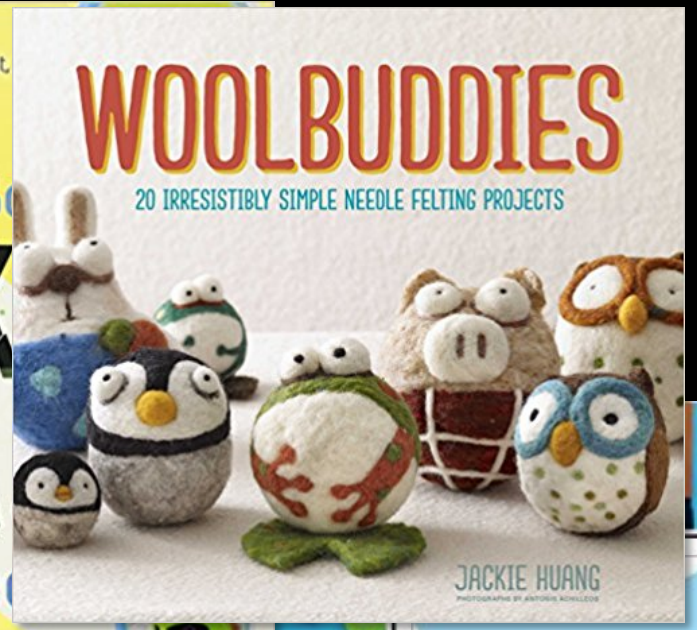
STREAM

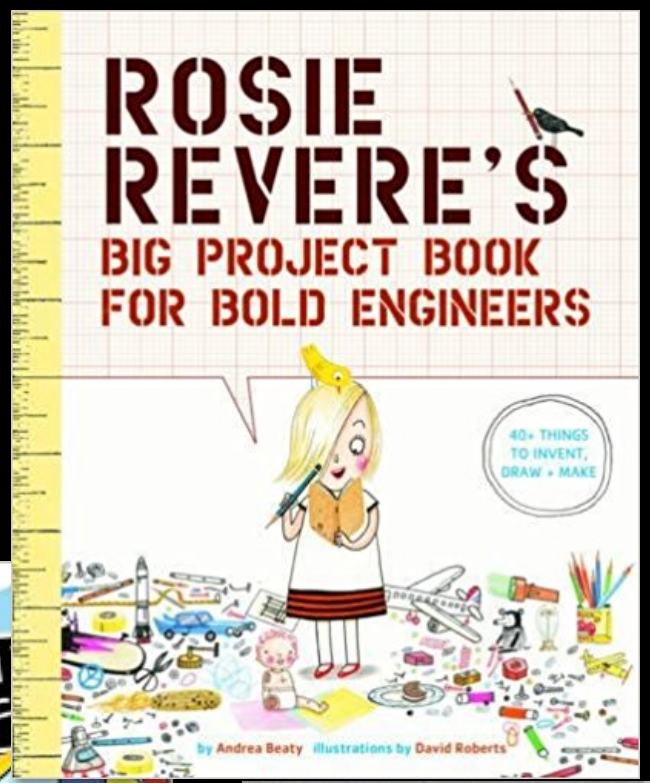
Reading and literature resources esearch

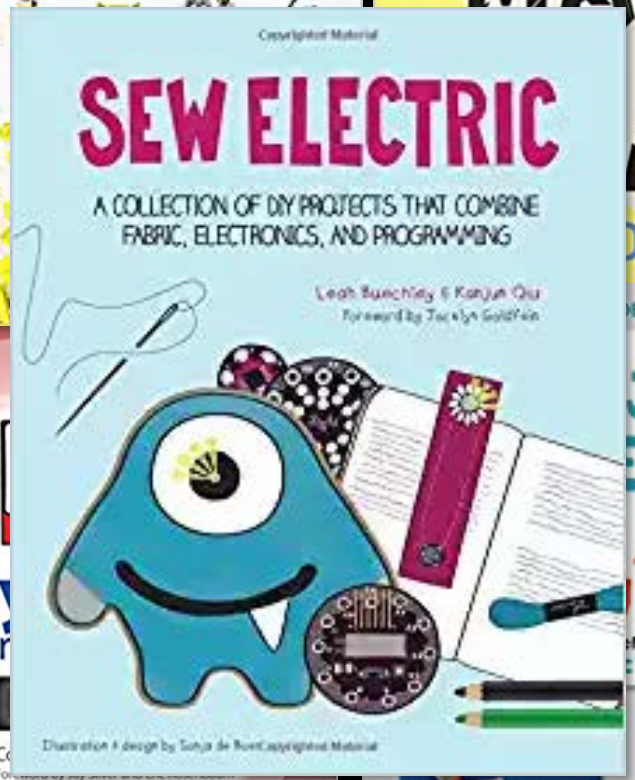
BALLOON OVER BROADWAY
Melissa Sweet
Going Pla
WHAT DO YOU DO WITH AN IDEA?
Written by Kobi Yamada
Illustrated by Mae Besom
EXTRA
HORTI
MIRACU
MECHAN
Copyrighted Material
PETER H REYNOLDS
Copyrighted Material
From the New York Times bestselling creators of Iggy Peck, Architect and Rosie Revere, Engineer
ADA TWIST, SCIENTIST
by Andrea Beaty illustrated by David Roberts
If I
a
OSIE
EVERE,
NGINEER
by Andrea Beaty illustrated by David Roberts
BEAM of Light
THE MOST MAGNIFICENT THING
ASHLEY SPIRES

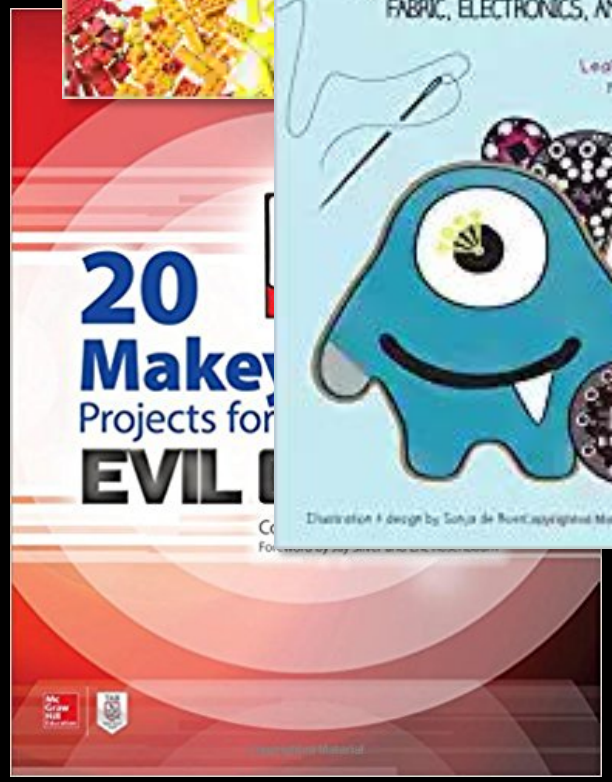

THE LEGO IDEAS BOOK
UNLOCK YOUR IMAGINATION

Inspiring Makers to Experiment, Create, and Learn
The Big Bo
MAK
A


WOOLBUDDIES
20 IRRESISTIBLY SIMPLE NEEDLE FELTING PROJECTS
JACKIE HUANG

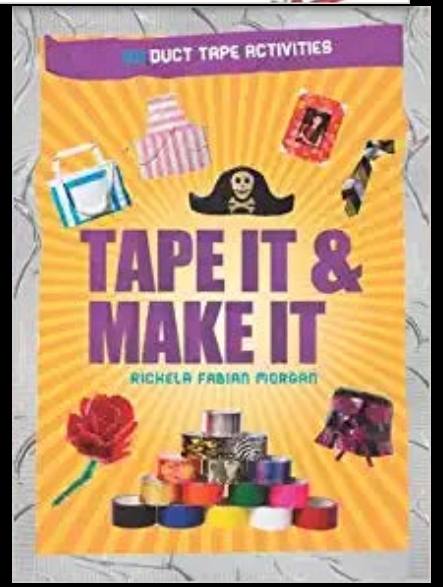

ROSIE REVERE'S
BIG PROJECT BOOK FOR BOLD ENGINEERS
40+ THINGS TO INVENT, DRAW + MAKE
by Andrea Beaty illustrations by David Roberts


SEW ELECTRIC
A COLLECTION OF DIY PROJECTS THAT COMBINE FABRIC, ELECTRONICS, AND PROGRAMMING


20
Makey
Projects for
EVIL

for Today's TECHNO-CRAFTER
JECTS
WITH a
AD
TER
Discarded
tronics
Make a first-aid kit out of a broken IPOD
Turn your dead MOUSE into a pencil sharpener
Upcycle an old LAPTOP into a digital photo frame
Raise a FLAT-SCREEN ant farm
Plus six ways to reuse a HARD DRIVE
By RAndy SaRafan

The Invent to Learn GUI
CLASSROOM TECHNOLOGY PROJECTS
SCRATCH
TURTLE ART
ROBOTS
MAKEY MAKEY
ELECTRONIC
3D printing
SQUISHY CIRCUITS
POSTCARDS
JOSH BURKER

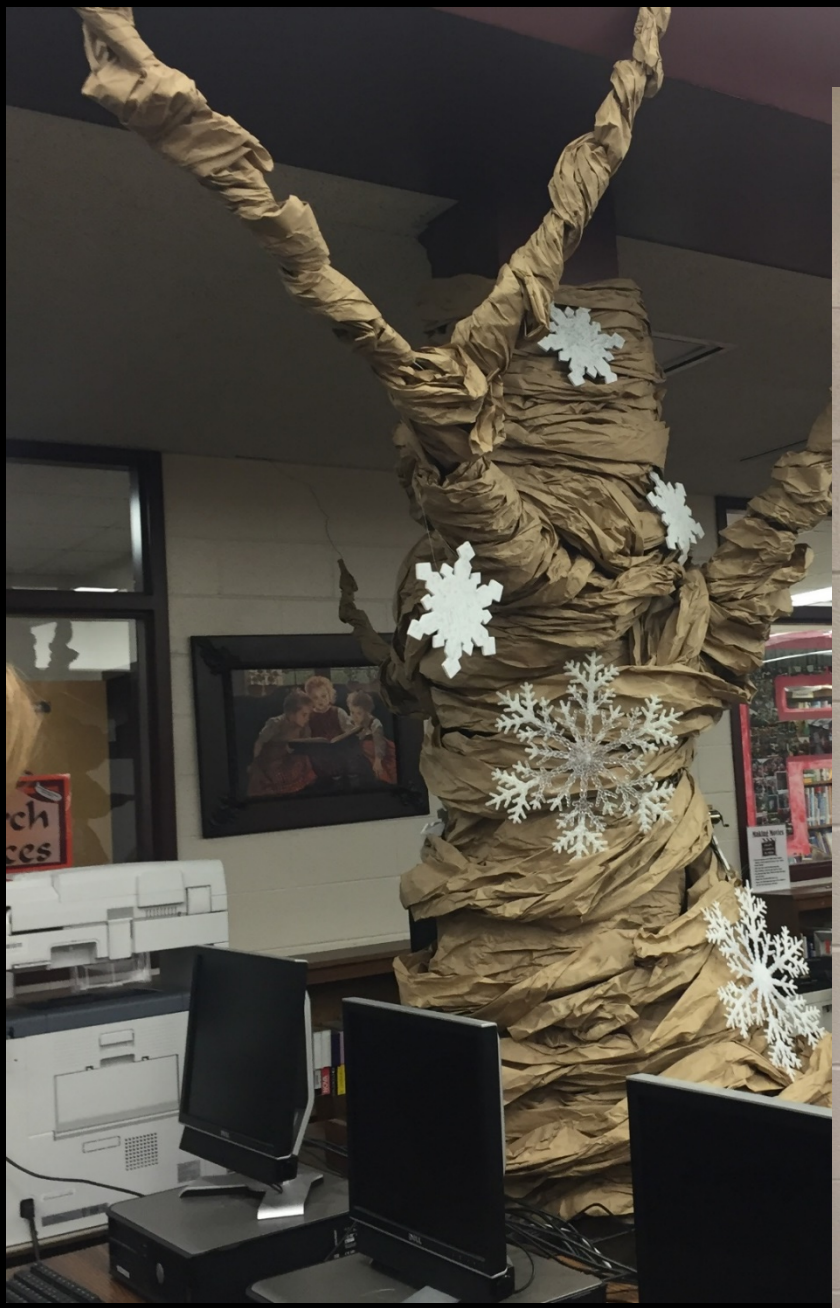

DUCT TAPE ACTIVITIES
TAPE IT & MAKE IT
RICHELA FABIAN MORGAN

Resources

It's NOT About the Stuff

“There is NOT just one right way to do library.”

– Joyce Valenza

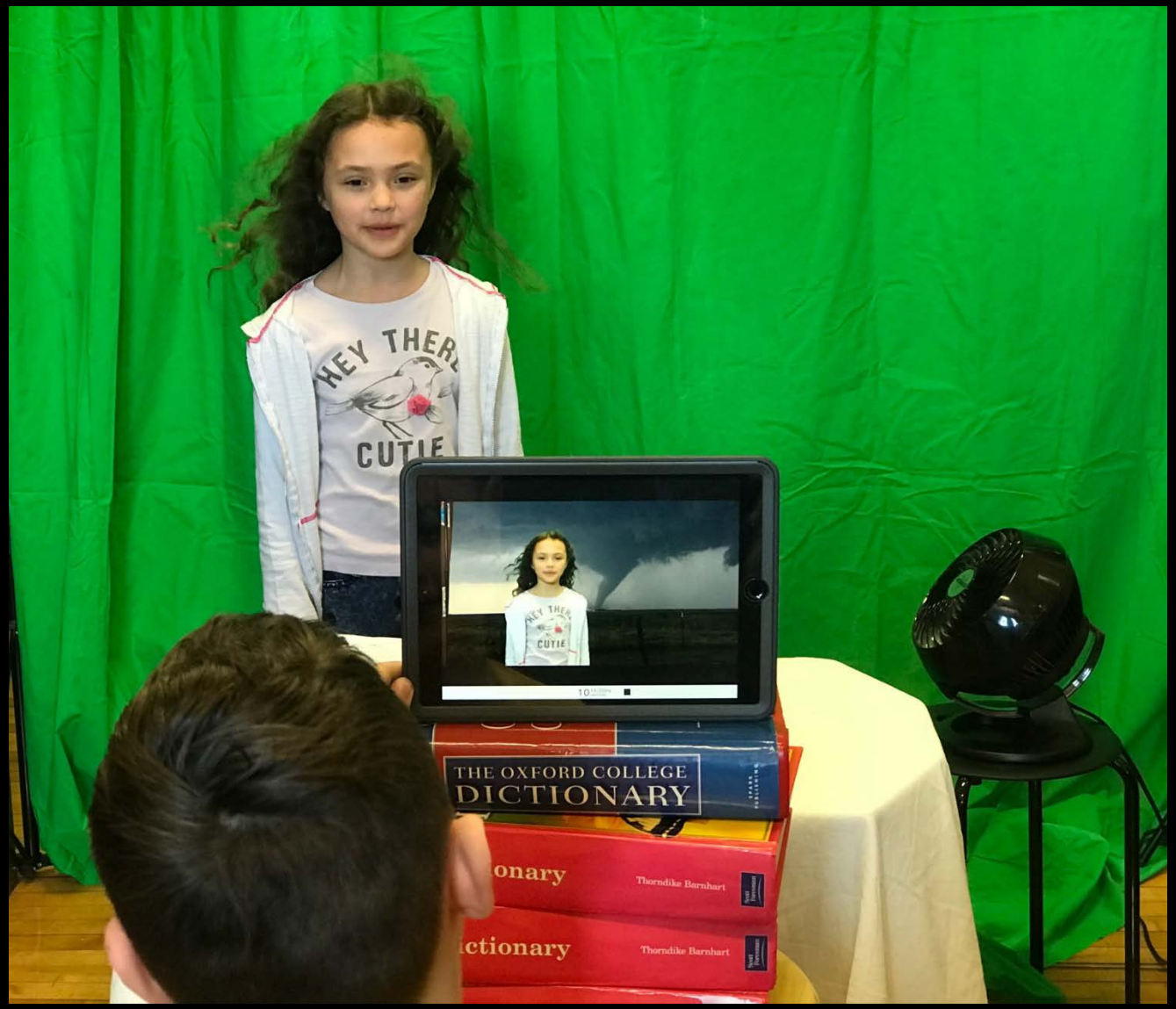


Makerspace
model
painting
BUILD
play
mural
furniture design
animation
invention
game
create
test
comic strip
code a game
produce
sew
clothing design
experiment
commercial
drawing
sculpture
Claymation
demonstration
poster
puzzle
engineer
webpage
diorama
collage
design
book
PSA
Public Service Announcement
simulation
diagram
sketch
cartoon
newspaper
video
digital story
robot
puppet show
transform
podcast
costume
imagine
mosaic
compose
app creation
architecture plan

How a library may look depends on needs, culture, and interests of a school community.

Themes

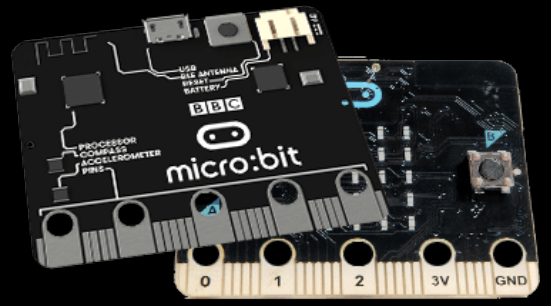
Film making

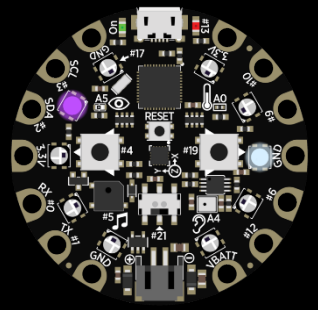

HEY THERE
CUTIE
THE OXFORD COLLEGE
DICTIONARY
Thorndike Barnhart
Thorndike Barnhart

The Green Screen
MAKER
SPACE
Project Book
Todd Burleson

Coding and Programming

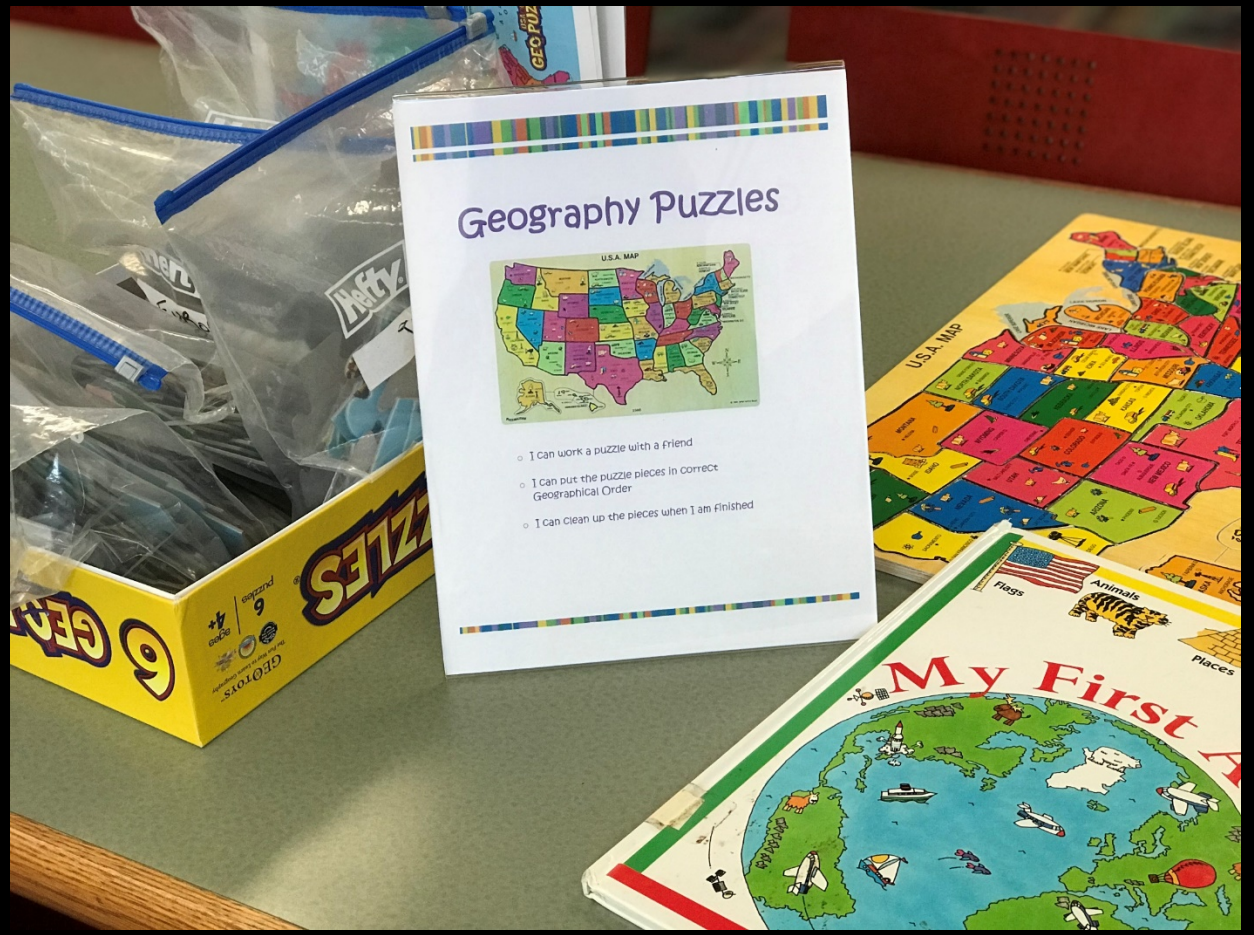
Robotics





Building

Games and Puzzles



Breakut Edu

IF YOU TAKE A MOUSE TO SCHOOL
BY Laura Numeroff
ILLUSTRATED BY Felicia Bond
CHECK OUT

AR and VR

Design Challenges

Connecting groups globally

Research

I Need Help With My Website

By Greninja2 on Nov 13, 2017

Hello everyone! I'm here to say that i made a website, but i need help getting it online. How do you get it online? I'd like to publish it to show my Minecraft mods and other stuff, so if anyone knows that would be helpful.

Created: Nov 13, 2017, 1:39pm Updated: Nov 13, 2017, 1:53pm Show Revisions

Bob The Blob

I know how to get it online you go on google and you look up how to make a website online.

Nov 13, 2017, 2:03pm (70.166.73.59) Edit | Remove | Reply | Unapprove

MintElephant3

You made a website! You must have a lot of time on your hands.

Nov 13, 2017, 2:04pm (70.166.73.59) Edit | Remove | Reply | Unapprove

Weird Developer Guy

its actually not that hard you just make a text file or .txt and rename the .txt to .html or .htm

Nov 14, 2017, 11:27am (70.166.73.59) Edit | Remove | Reply | Unapprove

The Epic Onion100

Teach me how to make a website please

Nov 16, 2017, 7:20pm (24.254.148.175) Edit | Remove | Reply | Unapprove

Greninja2

One of the best ways to learn is at the W3schools website, they have coding tutorials and might help you. ☺

Nov 28, 2017, 1:26pm (70.166.73.59) Edit | Remove | Reply | Unapprove

theboss375

I also made a website and if any other people want to i recommend buying the book create with code that is what Greninja2 did the book is very disricptive

Nov 28, 2017, 11:59am (70.166.73.59) Edit | Remove | Reply | Unapprove

BLACK DIAMOND

Or the Dummies book on it they have very good ones.

Mar 6, 2018, 2:08pm (70.166.73.59) Edit | Remove | Reply | Unapprove

HYUNDAI
220LC-9S

SUSTAINABLE DEVELOPMENT GOALS

Teach SDGs

www.teachsdgs.org

SDGs in Action App

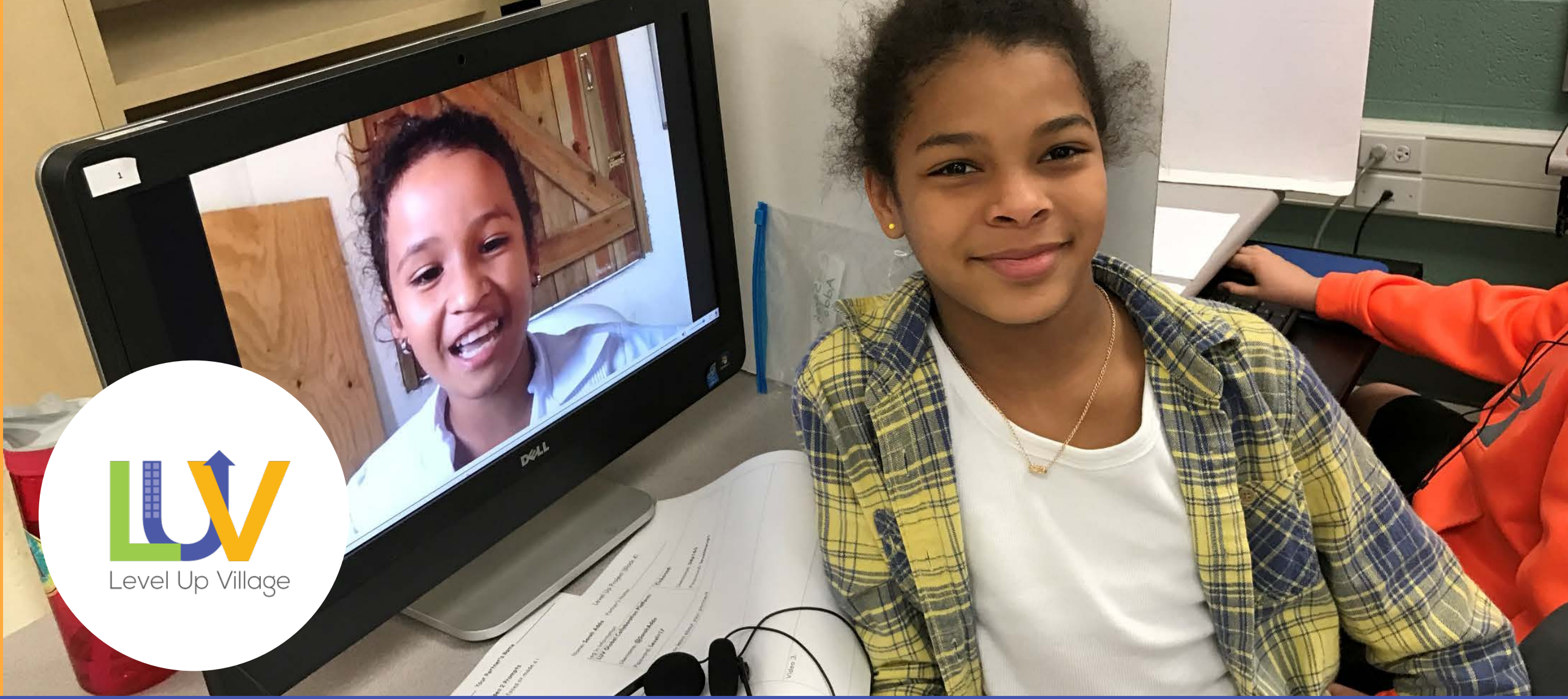
https://sdgsinaction.com

Free Online Course on Teaching the SDGs

https://education.Microsoft.com/courses-and-resources/courses/sdg

Check out the Twitter Hashtags:

#TeachSDGs



1:1 virtual, collaborative global STEAM (STEM + Arts) courses between students all around the world

PIONEERING GLOBAL STEAM | www.levelupvillage.com

List of Enrichment Collaboration Experiences

Global Conversations: Malala Yousafzai
Literature, Global Citizenship
Ages 11-15

Global Language Lab
Foreign Languages, Global Citizenship
Ages 11-15

Global Storybook Engineers
Literacy, Engineering, Global Citizenship
Ages 4-7

Global Conversations: The Giver
Literature, Social Issues, Global Citizenship
Ages 11-15

Global Scientists
Water, Engineering, Global Citizenship
Ages 8-10

Global Programming: Animators, Creators, Designers
Coding, Global Citizenship
Ages 4-7, 8-10 and 11-15

Global Inventors
CAD, 3D Printing, Engineering, Global Citizenship
Ages 8-10 and 11-15

Global Sound Artists
Sound, World Music, Global Citizenship
Ages 4-7

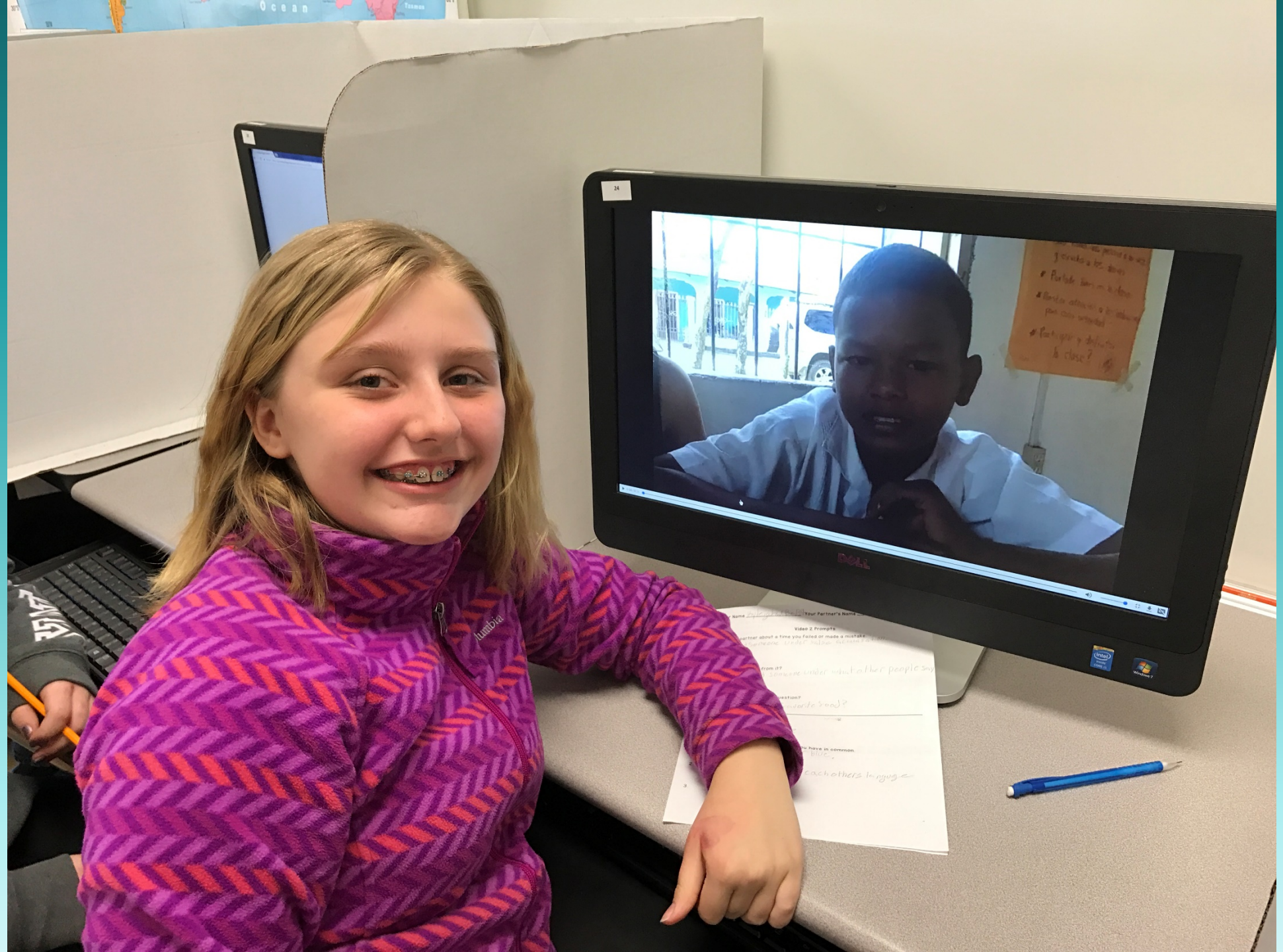
Global Web Designers
HTML/CSS, JavaScript, Web Design, Energy, Global Citizenship
Ages 8-10 and 11-15

Example Courses

- Build a solar flashlight
- Design a water filter
- Code a video game
- Make Musical Instruments

Example Countries

- Honduras
- Nicaragua
- Argentina
- Mexico
- Ghana
- Kenya
- Jordan
- Zimbabwe



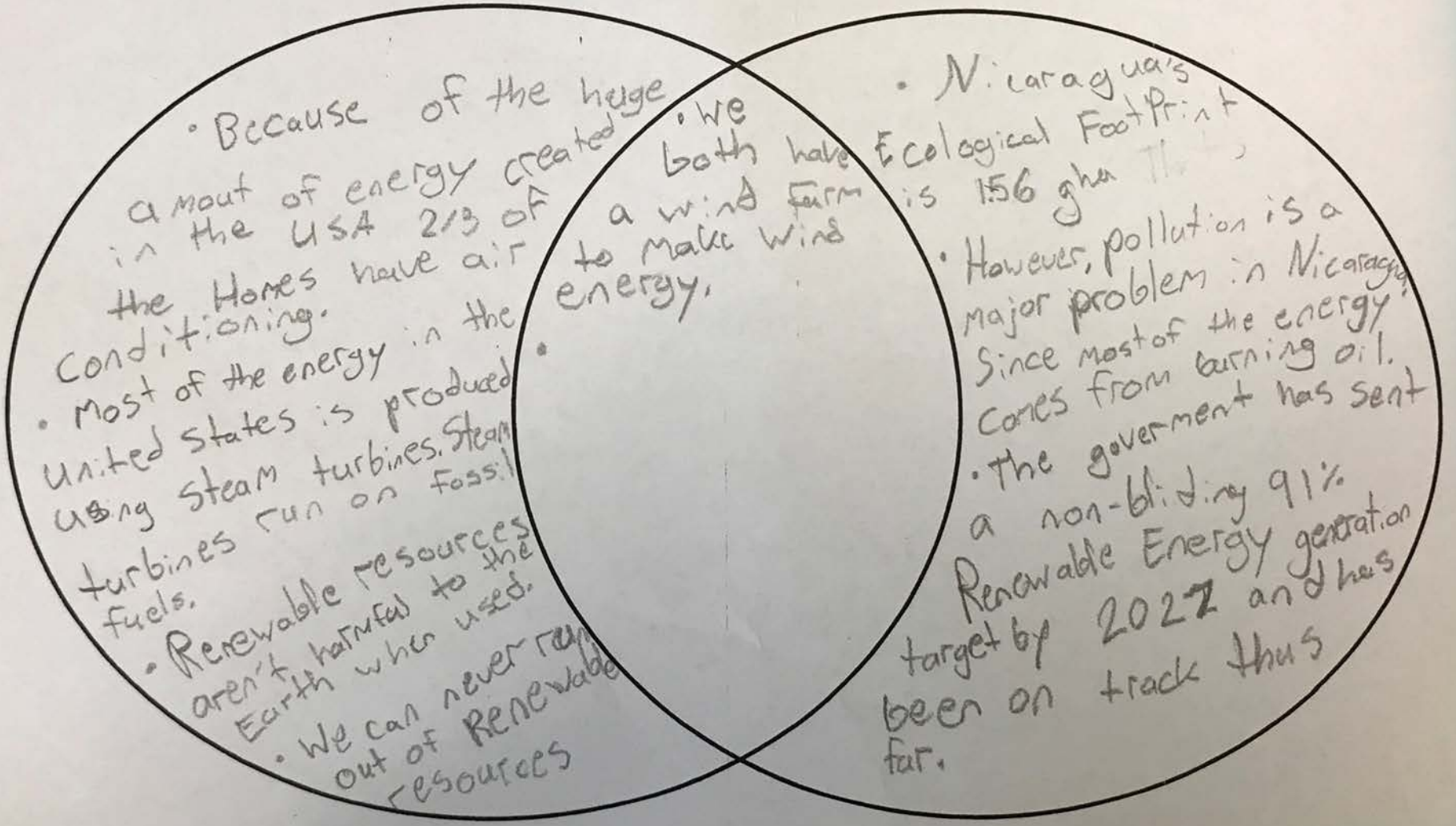
Global Inventors

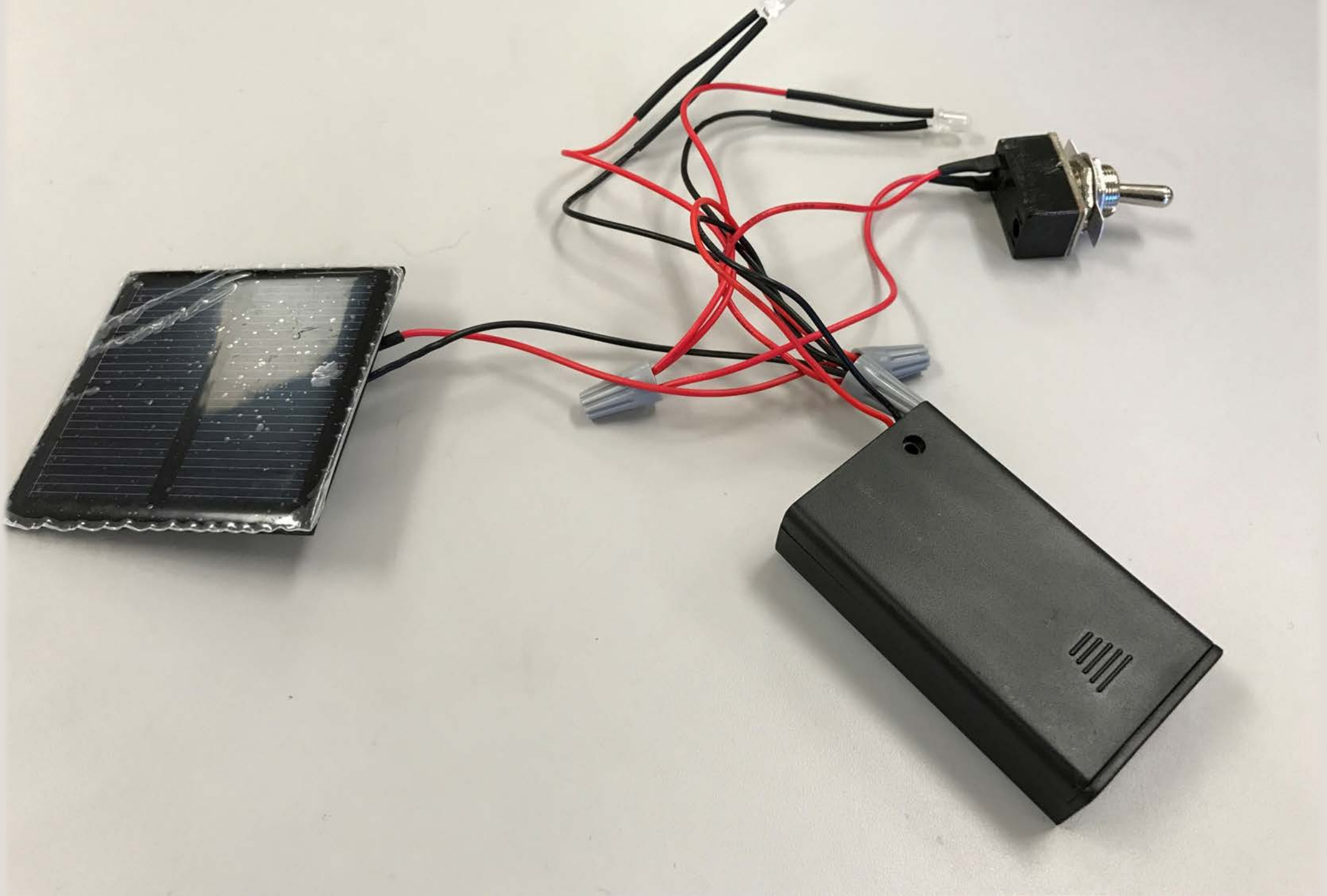
Elementary Spanish

Energy

USA

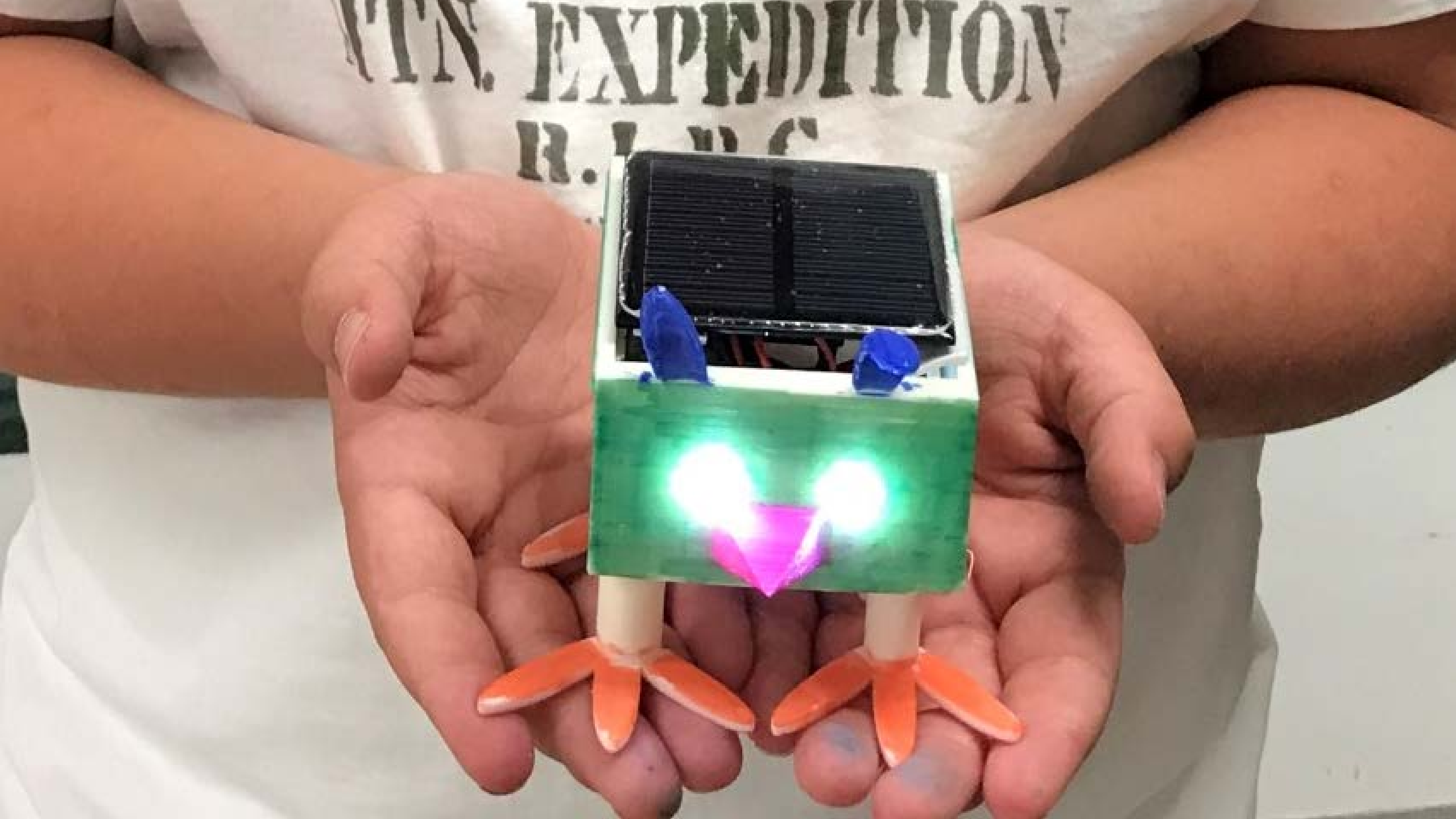
Nicaragua





DELL

Caution! HOT


EXPEDITION

Class of
2017

Global Scientists

RAW WATER
FILTERED
BACKWASH
WASTE

Tyler C./ Ald

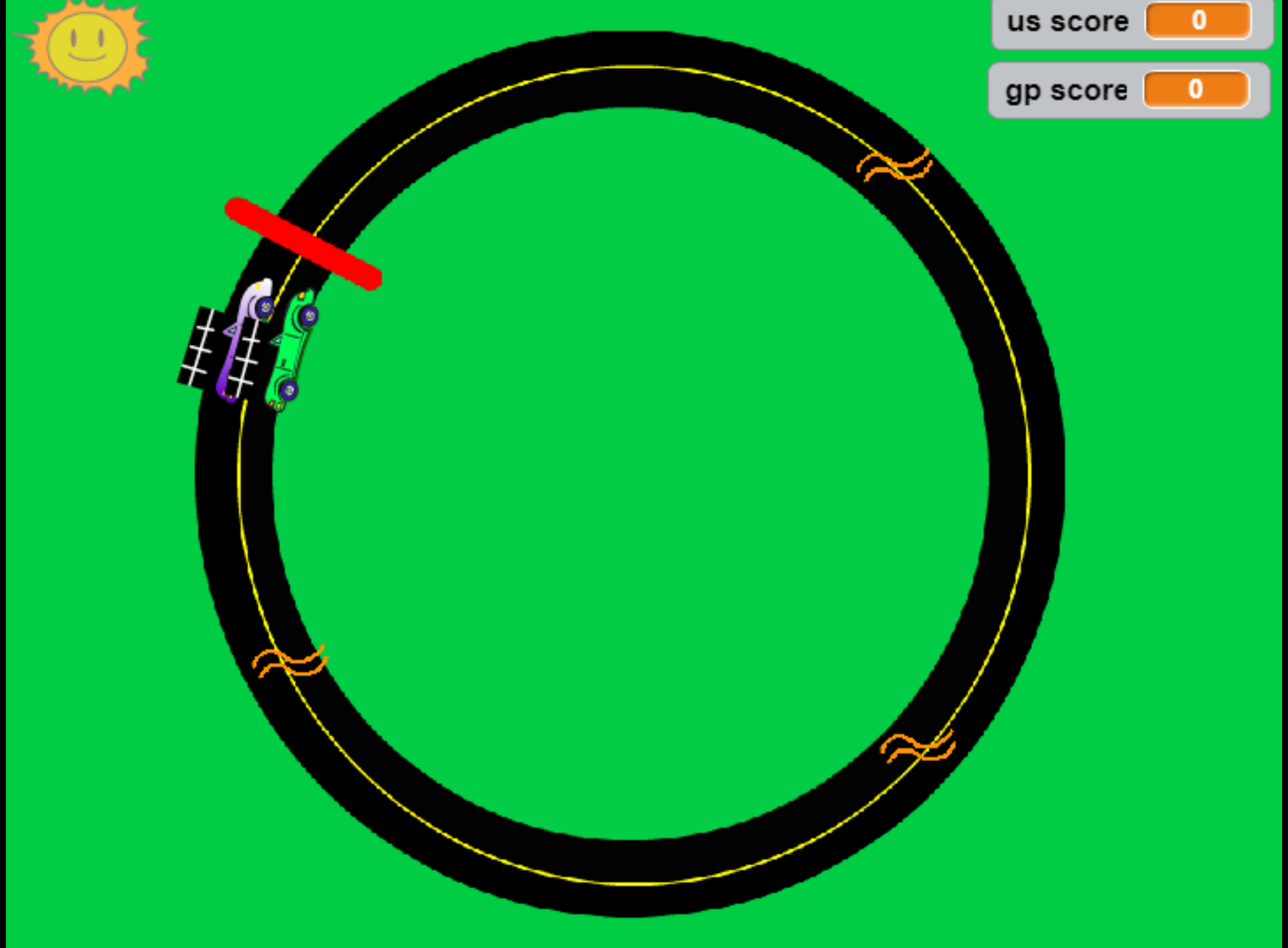
Ishan

Global Sound Artists

Global Programmers

Mrs. Scott – 3rd Grade
rsday After-School Coding Club
headphones for the students below in thi
with one of the students each Thursda
r coding club. They will be returned
d of coding club each Thursday.
January 19, January 26
ebruary 9, February 16, February
rch 9, March 16, March 23
Zack Brown
Sean Corkram
Ishan Patel
Felix Rodriguez
Nicholas Wilson
Christian Hill
DELL

21
Scratch 2 Offline Editor
File
Edit
Tips
About
ella fish
score
Scripts
Costumes
Sounds
Motion
Looks
Sound
Pen
Data
Events
Control
Sensing
Operators
More Blocks
Sprites
New sprite:
Fish1
Shark
Stage
1 backdrop
New backdrop
when clicked
set score to 0
set lives to 3
forever
point towards Fish1
move 2 steps
touching Fish1 ?
change lives by -1
move 200 steps
wait 1 secs
distance to Fish1 < 150
switch costume to shark-b
switch costume to shark-a
lives < 1
say game over
stop all
wait 1 secs
repeat 10
forever
if then
if then
else
wait until
repeat until
stop all
when I start as a clone
create clone of myself
delete this clone
Type here to search


us score
0
gp score
0

I hope that someday I will make something extraordinary that will help people all around the world. I will never forget this amazing experience, I hope that maybe you will be able to do it too!

Level Up Village
www.levelupvillage.com

Belouga
www.belouga.org

Empatico
https://empatico.org/

Global Read Aloud:
https://theglobalreadaloud.com

The Wonderment
https://thewonderment.com/

Reading and literature resources esearch

Safe Space to Learn

Libraries provide access for ALL.

Pictures and examples from…

Heather Balsley – William Byrd Middle School

Kim Booth – Glenvar Elementary

Sandra Marcus – Oak Grove Elementary

Sherri Rickman and Luanne Hatcher – Cave Spring Elementary

Find Presentation Resources:

www.LearningCollaboratory.com

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tcoffey@rcs.k12.va.us

@elemitrt

teaching-with-technology.com