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hi



# School & Public Library Partnerships: STEAM to Students

# Connect with Your Counterparts



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## What is Your Niche?

**Call and Introduce Yourself**

**Present at Conferences –**

**IDOE Summer of Elearning**

**<https://www.doe.in.gov/elearning/summer-elearning-list>**

**ILF**

**School Staff Meetings After School**

**STEM / STEAM Activities**

**Story Times at the School**



## **Bring the library to the students**

- **Book Talks**
- **Young Hoosier Book Talks**
- **Rosie Book Talks**
- **Battle of the Books**

## **Contact the school librarian**

- **Make a Flyer**
- **What will you talk about**
- **How long is the talk**

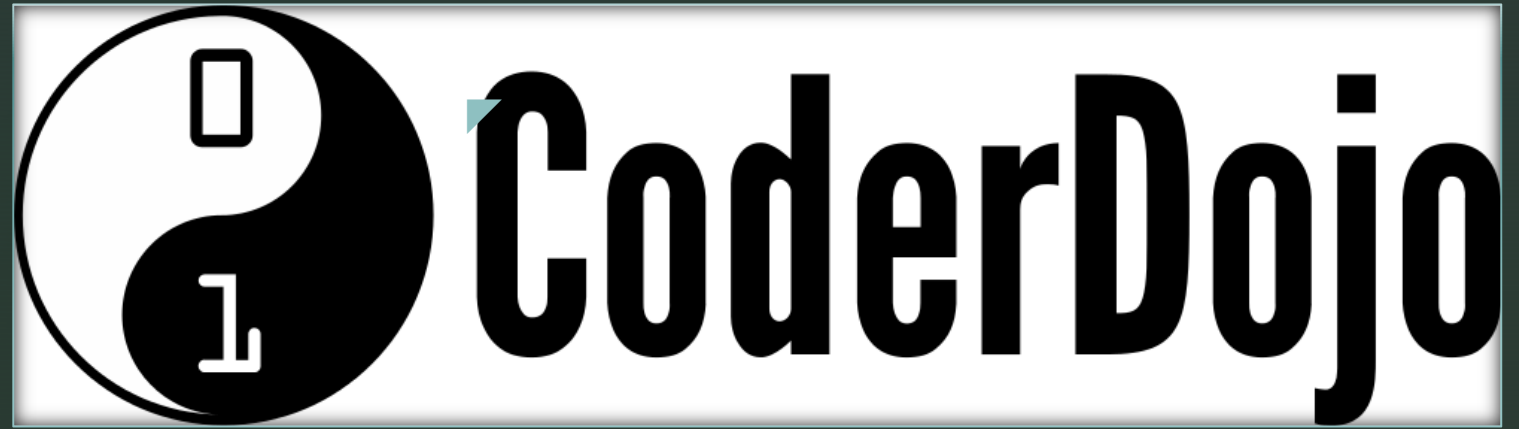


**Can I help you?**



Another ways to help

- Digital Citizenship
- Citing Resources
- How to use informational databases



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What does it  
take to start  
a Dojo?

- Space (office, canteen, etc)
- Chairs and tables
- WiFi
- Projector
- Some mentors

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- **Library**
- **Local Elementary School**
- **Local Middle Schools**
- **Connect with Coder Dojo Indiana -**  
**<https://www.techpointyouth.org/coderdojo/>**

Scratch



38 Projects

HTML & CSS



12 Projects

Python



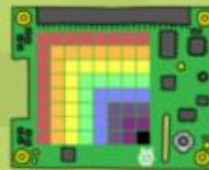
14 Projects

Raspberry Pi



6 Projects

Sense HAT



6 Projects

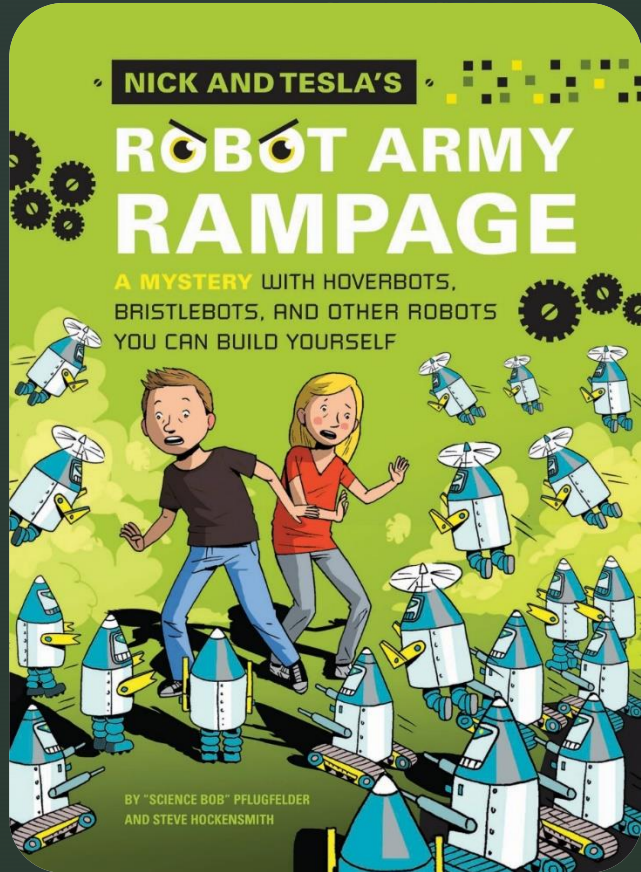
Sonic Pi



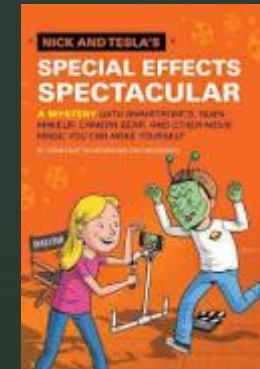
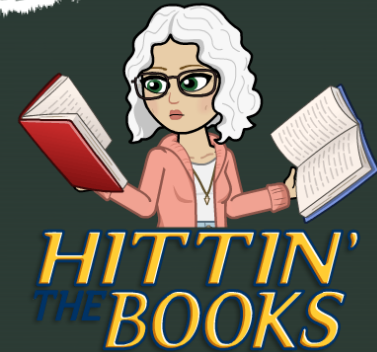
6 Projects

<https://www.codeclub.org.uk/projects>



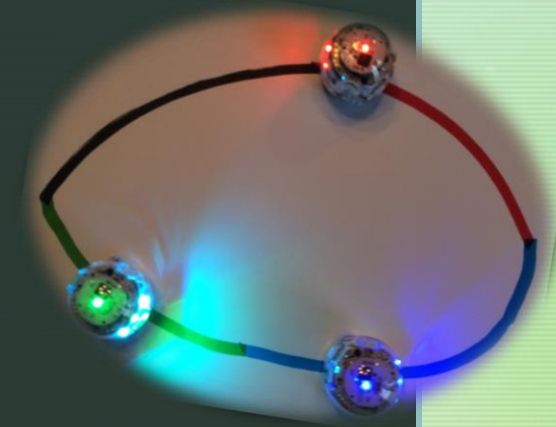
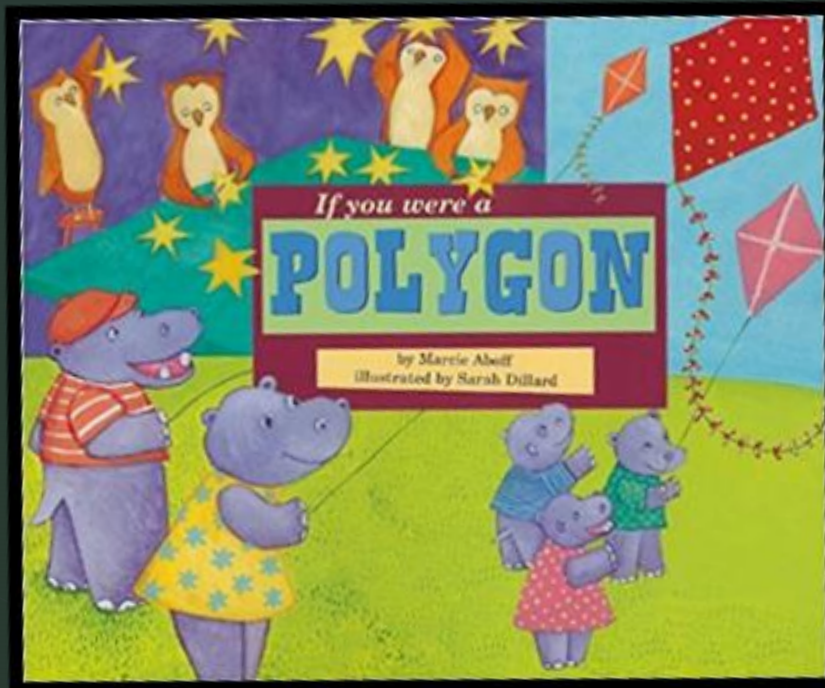
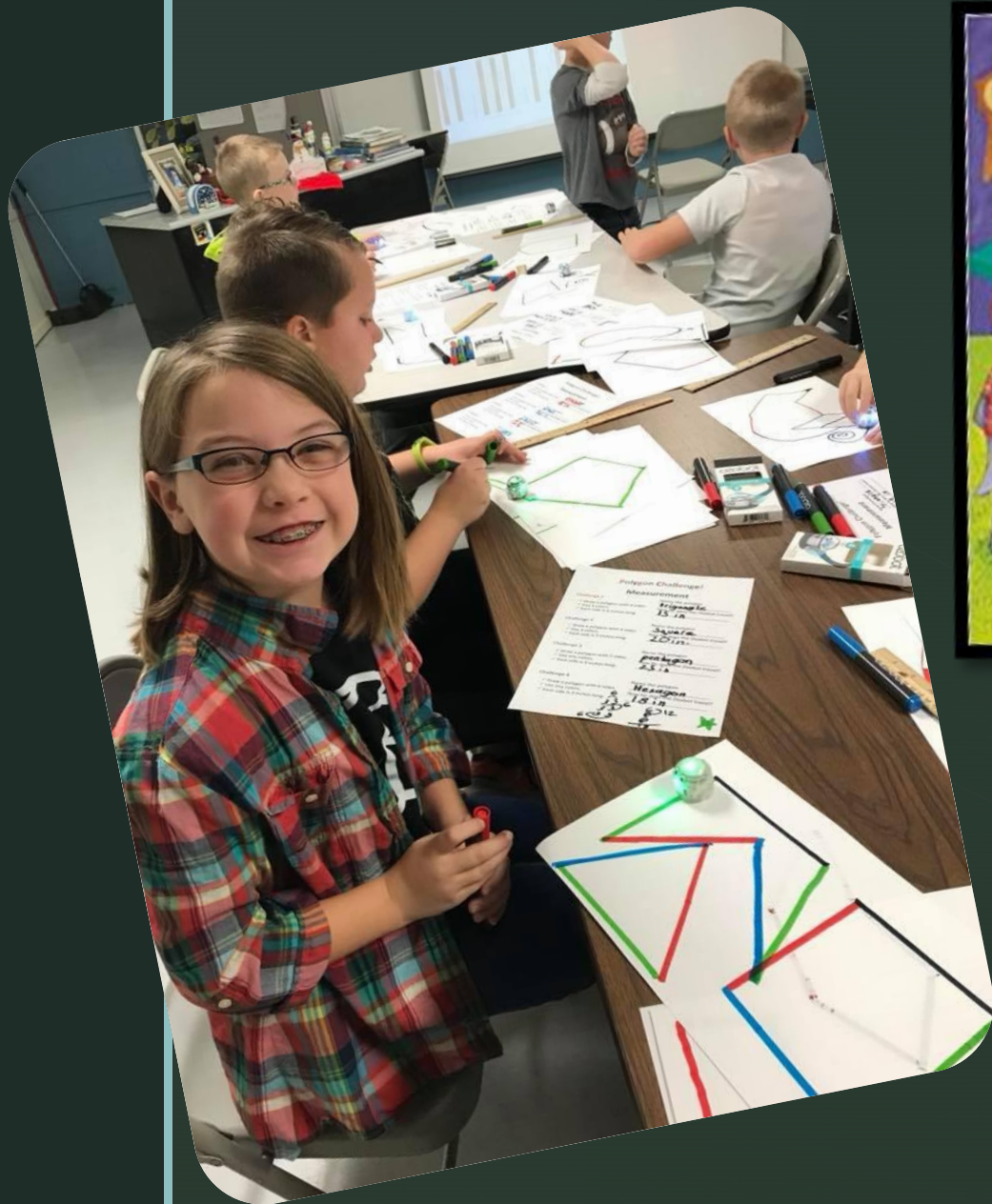


# NICK AND TESLA BOOK CLUB



Partnering with a Local Elementary School





## Polygon Challenge!

### Measurement

#### Challenge 1

- ✓ Draw a polygon with 3 sides.
- ✓ Use 3 colors.
- ✓ Each side is 5 inches long.

Name the polygon

\_\_\_\_\_

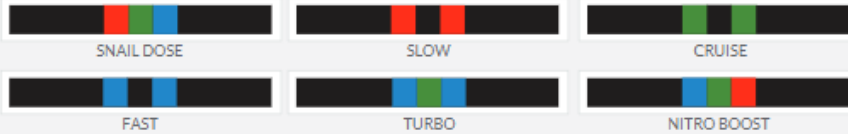
How far does the Ozobot travel?

\_\_\_\_\_ perimeter

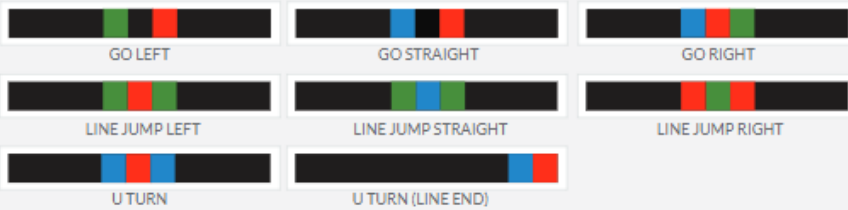


# ozobot COLOR CODE REFERENCE CHART

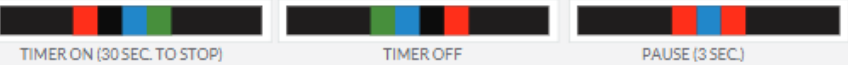
## SPEED



## DIRECTION



## TIMERS



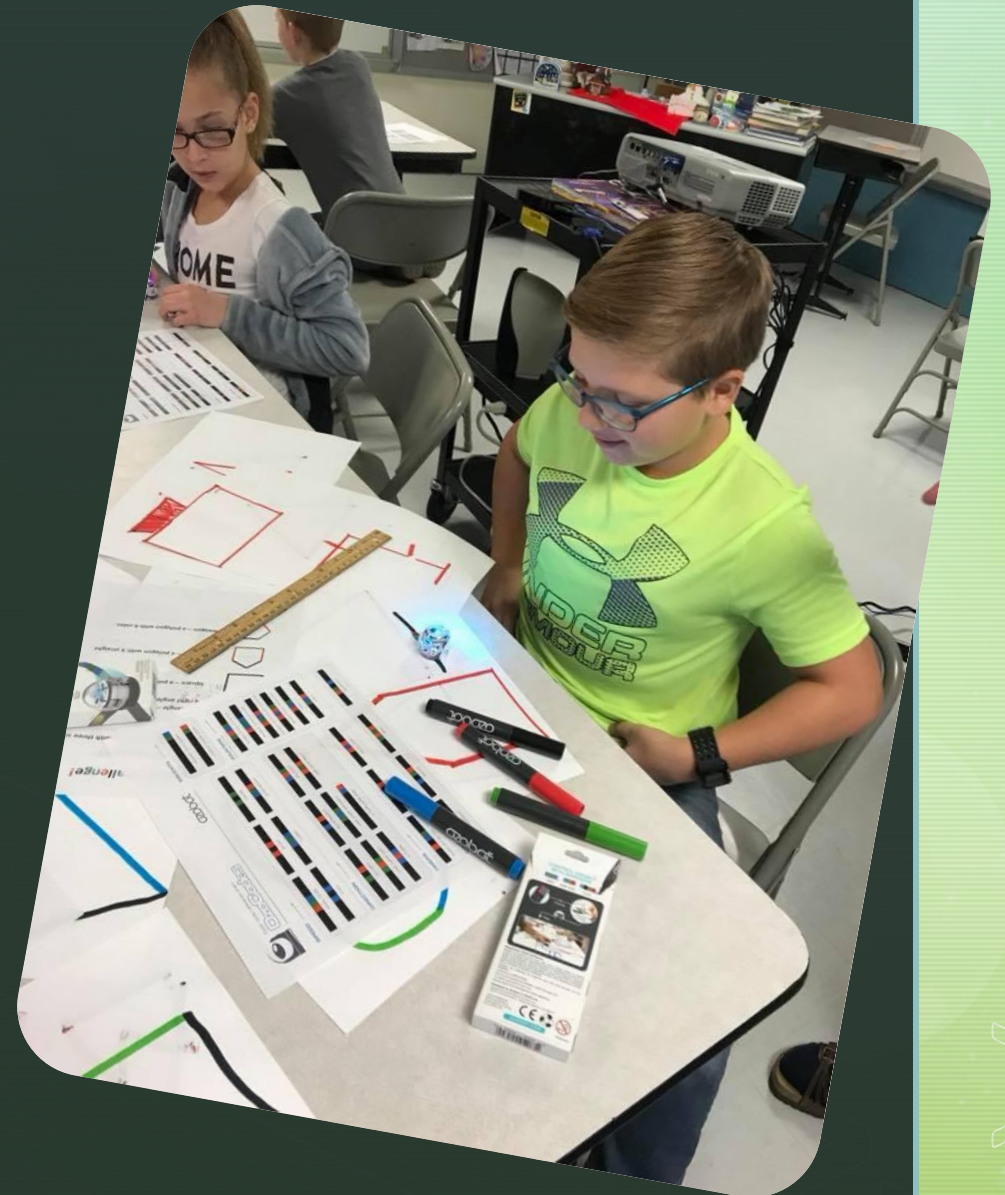
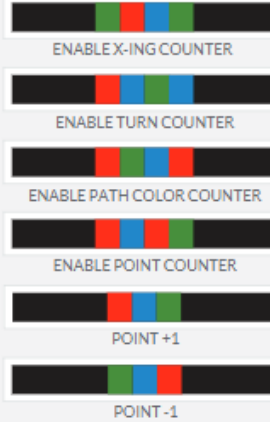
## COOL MOVES



## WIN/EXITS



## COUNTERS FIVE DOWN TO STOP







Goal



## Shape Tracer

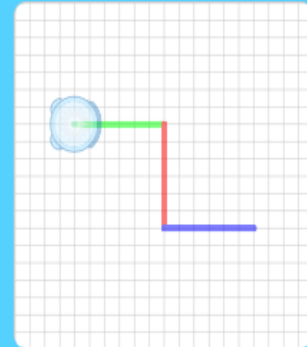
Movement



Light Effects



```
set light color [green]
move forward distance 6 steps speed slow
set light color [red]
rotate right
move forward distance 6 steps speed slow
set light color [blue]
rotate left
move forward distance 6 steps speed slow
```



Run


Load Ozobot

Help







# OZOBOT LESSON LIBRARY



COLOR CODES  
BASIC TRAINING



OZOBLOCKLY  
BASIC TRAINING




DECONSTRUCTION  
COMPUTER SCIENCE SERIES

FIND LESSONS HERE

SEARCH


K-1 RECOMMENDED STEAM INTEGRATED LESSONS

SEE MORE




ACTIVITY

Mission to Neptune  
by Ozobot




LESSON

Write Your Name  
with OzoCodes  
by Ozobot




ACTIVITY

100 Centimeter Ozo-  
Dash  
by Ozobot



ACTIVITY

Code a Story - Coding  
with There Was a Cold  
by Jennifer Mellina




LESSON

Create!  
by Joslyn Buhler


2-3 RECOMMENDED STEAM INTEGRATED LESSONS

SEE MORE




LESSON

Modeling Animal  
Habits and Habitats  
by Ozobot




LESSON

Ozobot's Fairytale,  
Lesson 1  
by Ozobot




CLASSROOM  
APPLICATION

Multiplication Table  
Practice  
by Richard Born



LESSON

Ozobot Challenge in  
Chronological Thinkin  
by Ozobot




LESSON

Eclipses and Celestial  
Mechanics  
by Ozobot

- Online Lesson Ideas

## Level UP

## 3D Printed Costumes





## Program features

- Encrypting and decrypting
- Messages to crack
- Cryptography games
- Website activities
- Resources for teachers to create activities for their students



## These activities promote

- Team work
- Self confidence
- Good mathematical practices
- Computational thinking
- 21st Century Skills
- Having fun while learning!

### Coding with littleBits

Are you looking for a way to support your patrons in their quest to learn to code? Code Kits from littleBits are a great place to start. In this session you will have an opportunity to test drive the Code Kits and see how you can create an engaging and rewarding environment for coders – whether they are novice or seasoned pros! The littleBits Code Kits provide multiple learning pathways for coders as well as plenty of support materials for the facilitator.

**Presenter:** Deb Gaff, Bartholomew County Public Library

- **ILF Southeast – April 20<sup>th</sup> New Albany-Floyd County Public Library**



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