

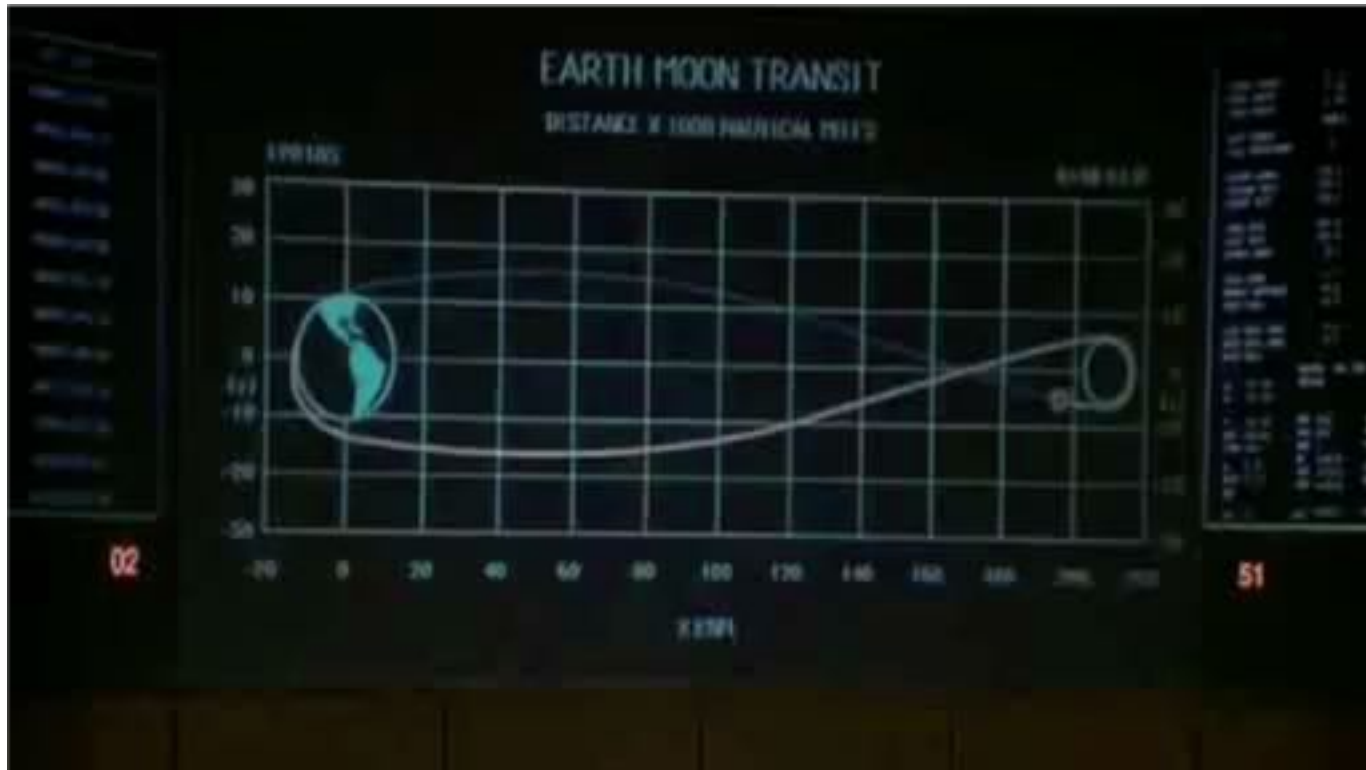
Pensiero Computazionale

Per la scuola dell'infanzia e la scuola primaria

Ottobre 2018

Pensiero Computazionale

L'insieme dei **processi mentali** che vengono posti in essere
nella formulazione di un **problema**
e della sua relativa **soluzione**



Apollo 13 – Creatività in azione

<https://youtu.be/uBe-BZMY2nw>



Vi presento Scratch

Scratch

Chi l'ha inventato?



@Lifelong Kindergarten Group at the MIT Media Lab

SCRATCH

Ambiente di programmazione gratuito

Utilizza un linguaggio di tipo grafico

Muovere i primi passi

Evitando errori di sintassi





Un programmatore esce di casa per recarsi a lavoro.

La moglie gli dice:
«While you're out, buy some milk»

Il marito non fece mai più ritorno a casa...



Mark II

Il computer a relay

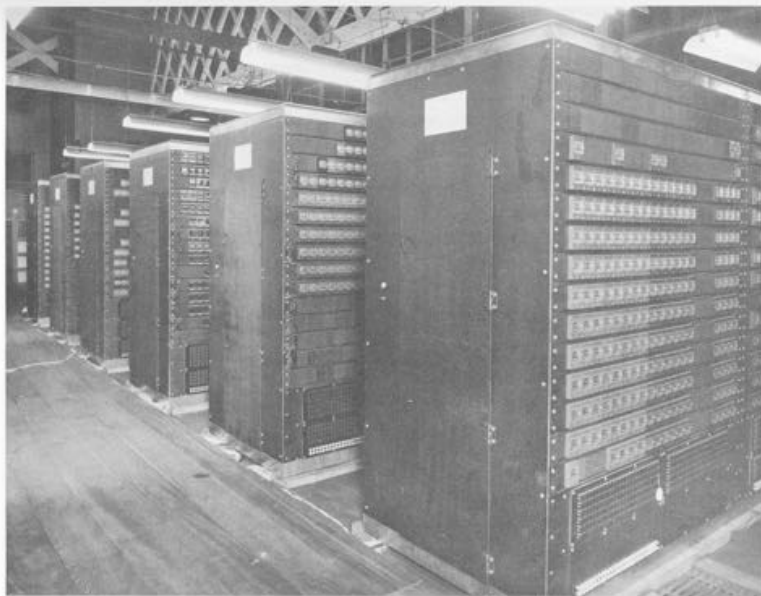


Figure 5 Mark II: Relay Cabinets

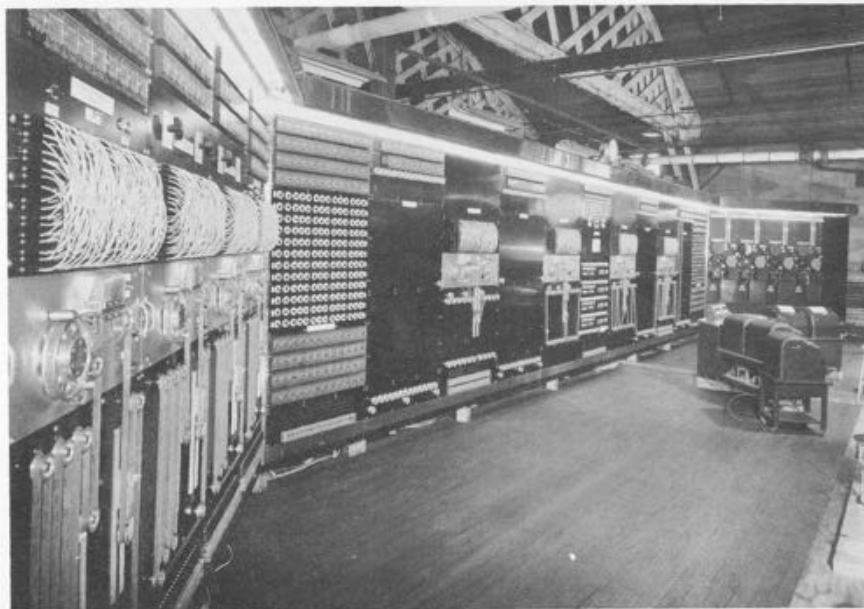


Plate I Main Control Board and Wings

Grace Hopper

E la falena...




9/9

0800 Antan started
 1000 " stopped - antan ✓

1300 (032) MP-MC 2.130476415 (032) 4.615925059(-2)
 (032) PRO 2 2.130476415
 convd 2.130476415

Relays 6-2 in 032 failed special speed test
 in relay 11,000 test.

1100 Relays changed
 Started Cosine Tape (Sine check)
 1525 Started Multi-Adder Test.

1545  Relay #70 Panel F
 (moth) in relay.

1630 Antan started.
 1700 closed down.

First actual case of bug being found.

Relay 2145
 032 2378

Homework

TED talk di Mitchel Resnick

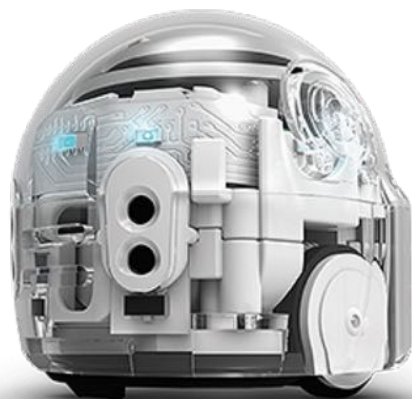


https://www.ted.com/talks/mitch_resnick_let_s_teach_kids_to_code?language=it#t-348340

Disegniamo un quadrato



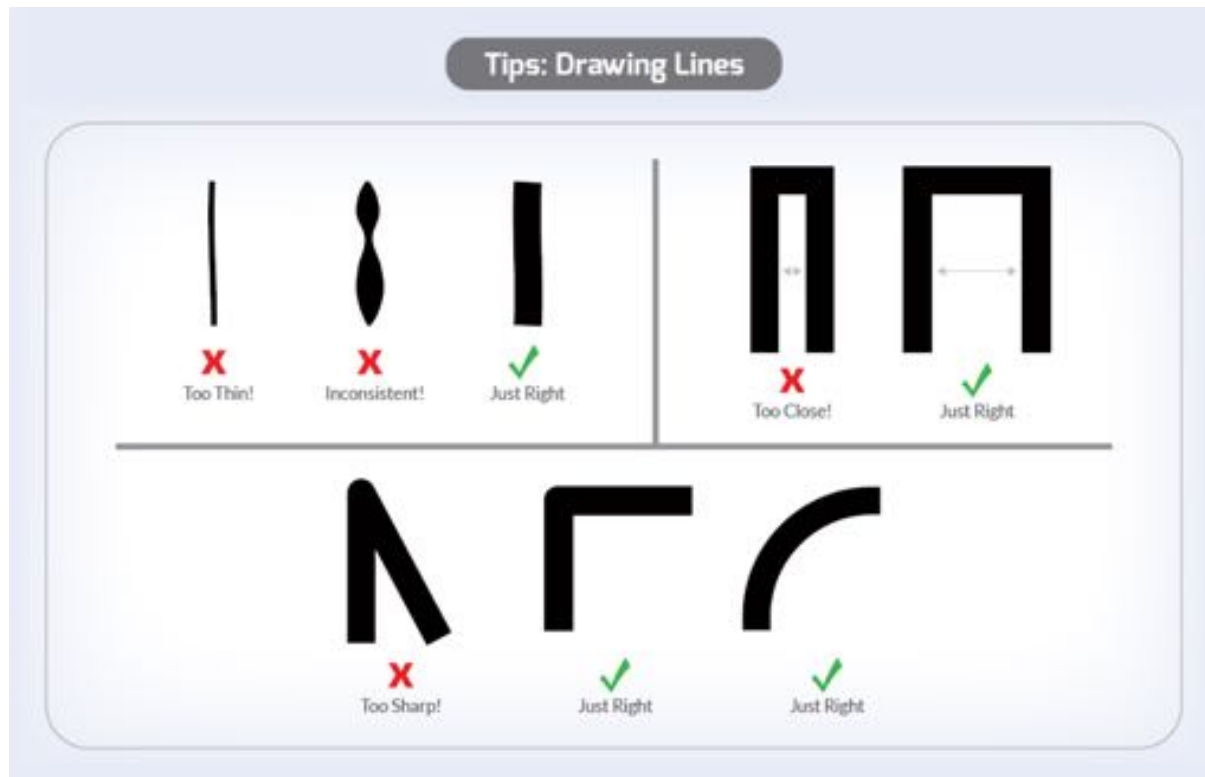
Ozobot



bit evo

<https://ozobot.com/>





Tips: Drawing Codes



X
Codes On
Colored Lines



X
Different
Sizes



X
White
Spaces



X
Overlapping
Colors



X
Too Dark



✓
Codes On Black
Lines



X
No Codes on
Corners!



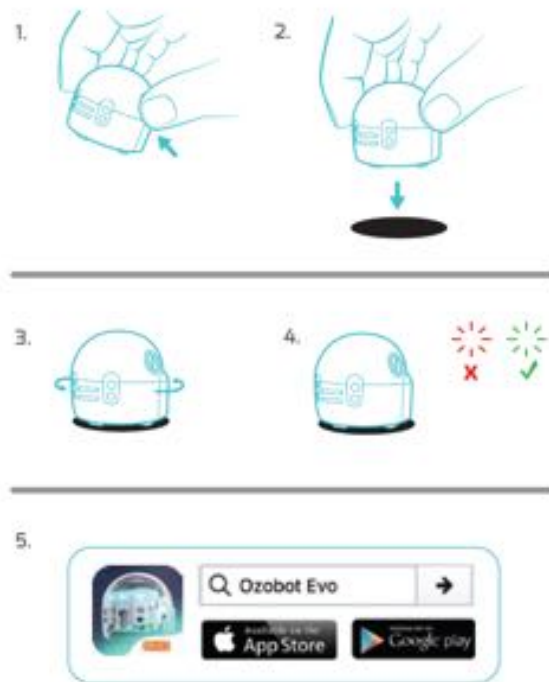
✓
Keep Codes on Straight
Lines Away from Corners



X
Too Close!



✓
Place Codes Away from
Intersections



1

Get Started

Calibrate Evo and download the app.

Place Ozobot Here



1. Press and hold power button for 2 sec. until top light flashes white.
2. Release power button and Evo's wheels will quickly calibrate. Place Evo on the black circle.
3. Evo will spin, move forward, then flash **green** if calibrated. If Evo flashes **red**, start over from Step 1.
4. Evo turns off after calibrating. Press the power button to start playing.
5. For the full Evo Experience, download the Ozobot Evo app. Collect stars as you go.

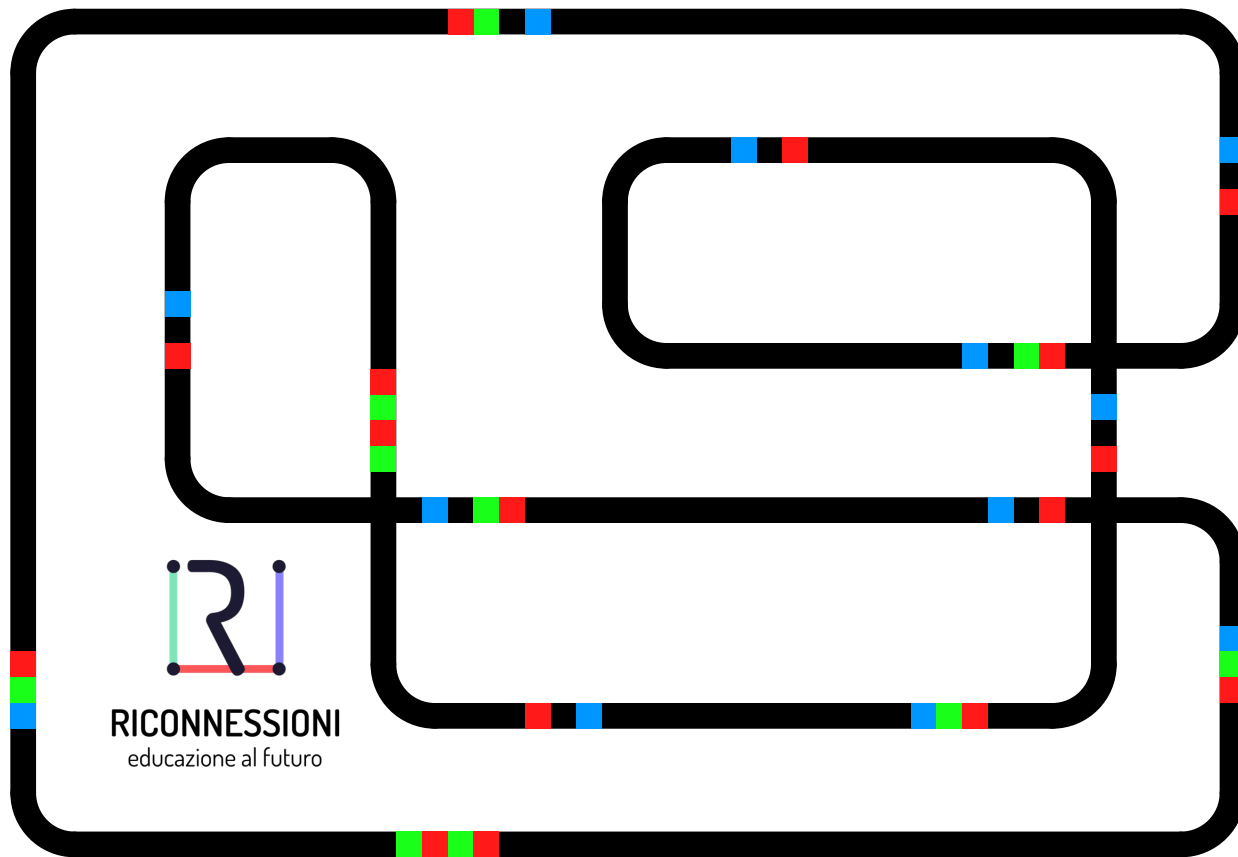


Lento



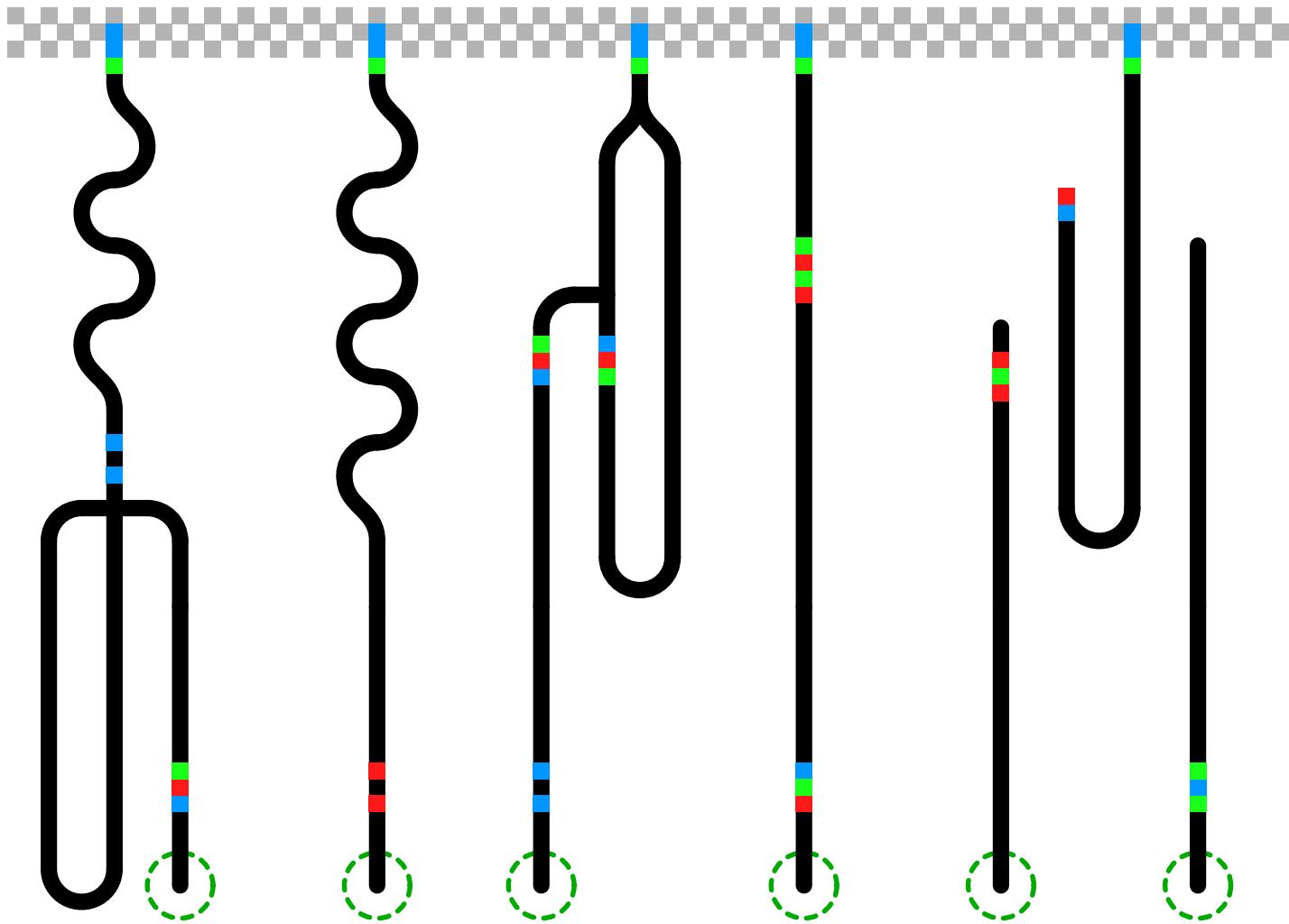


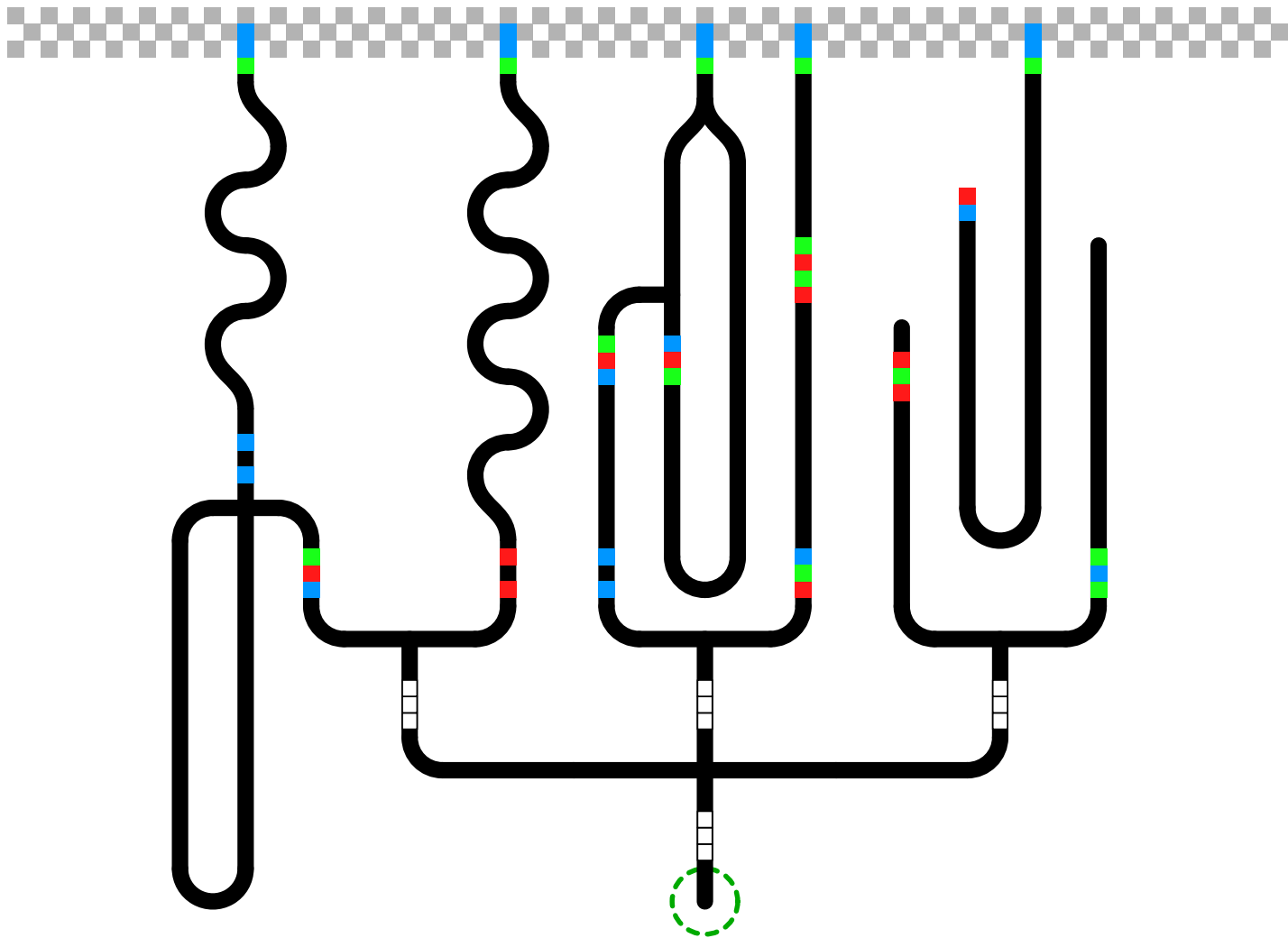
Veloce

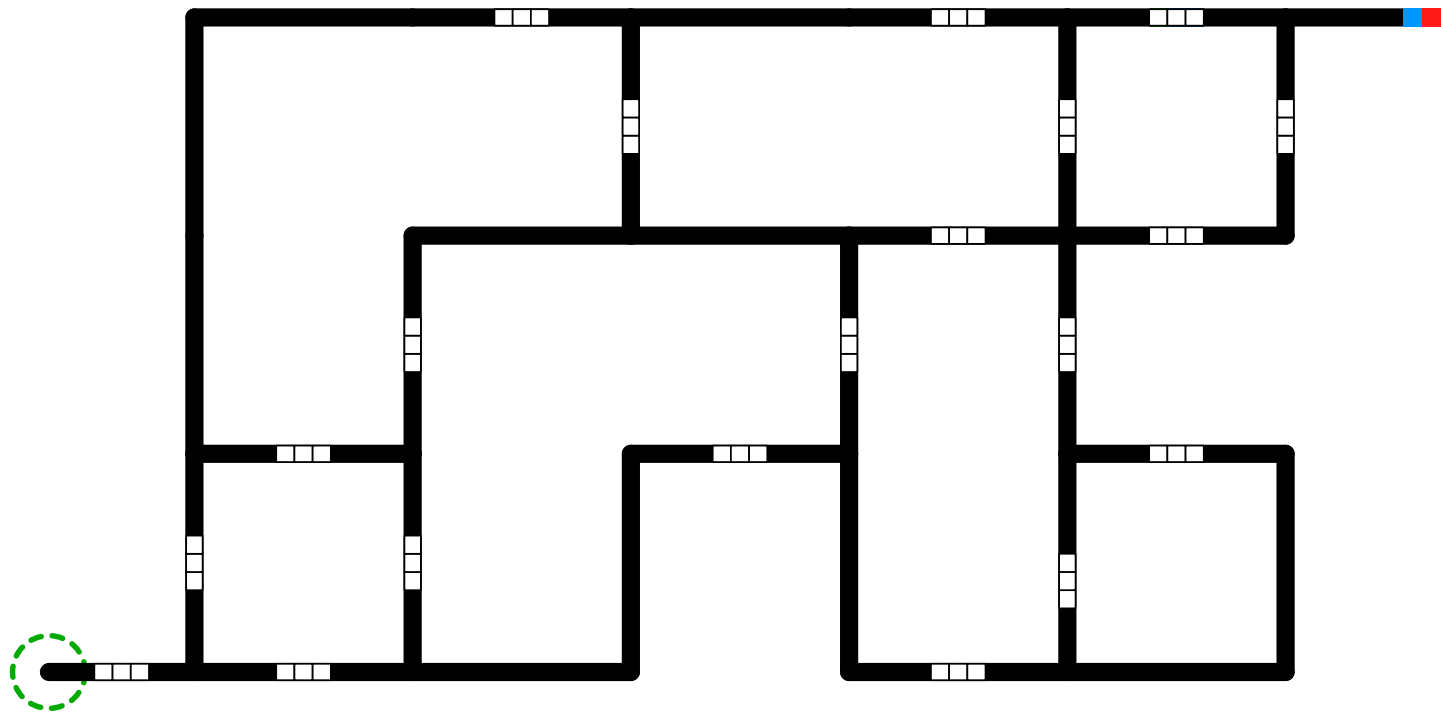


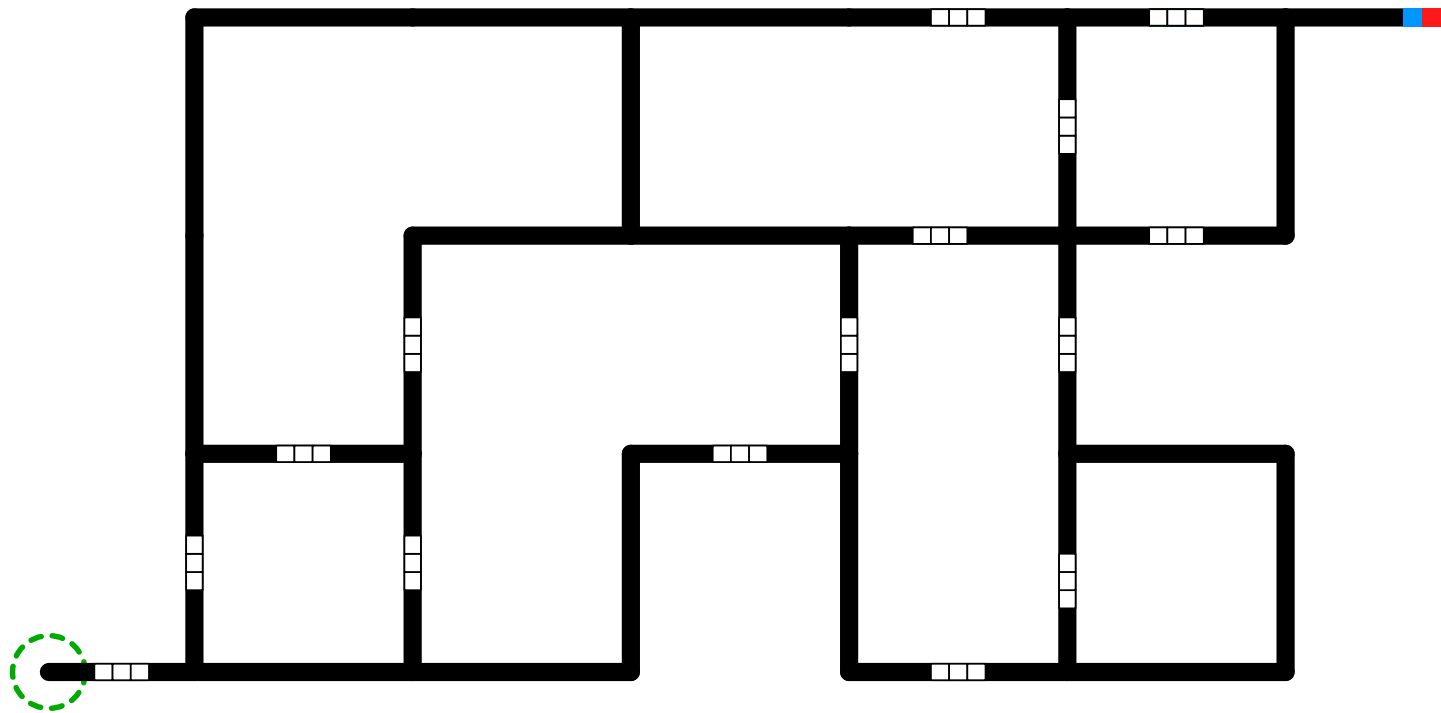
RICONNESSIONI
educazione al futuro

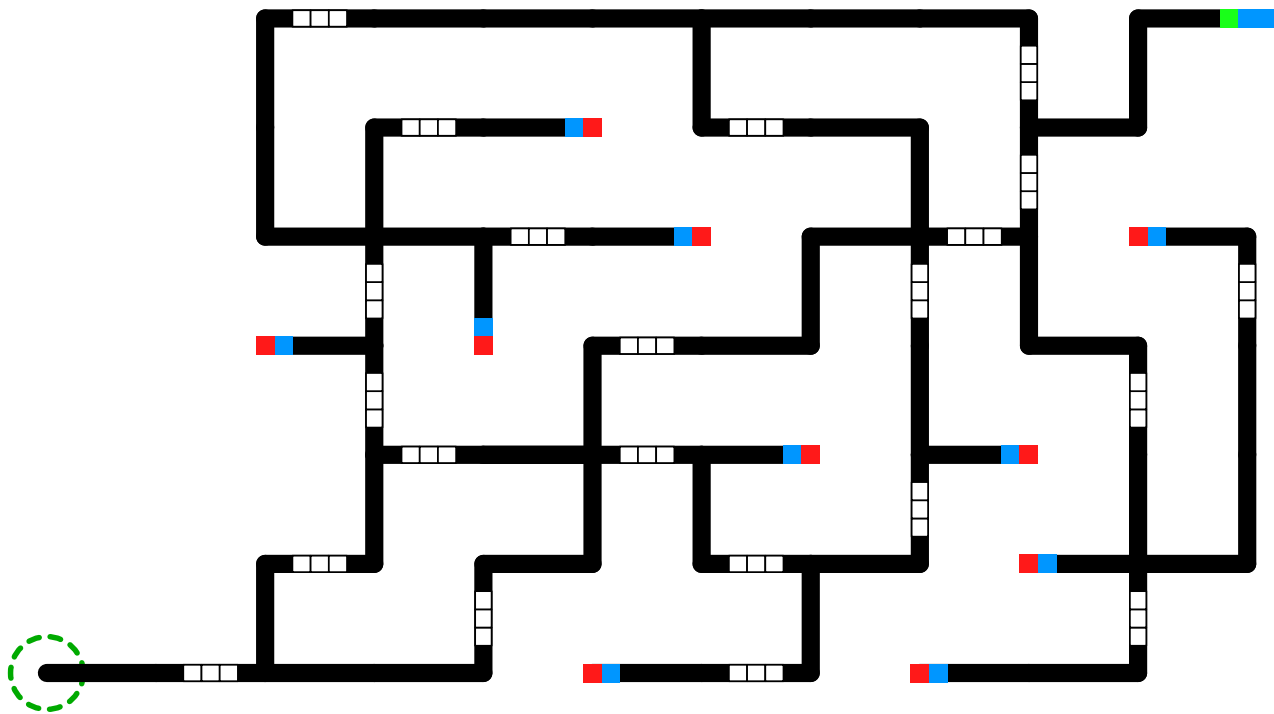


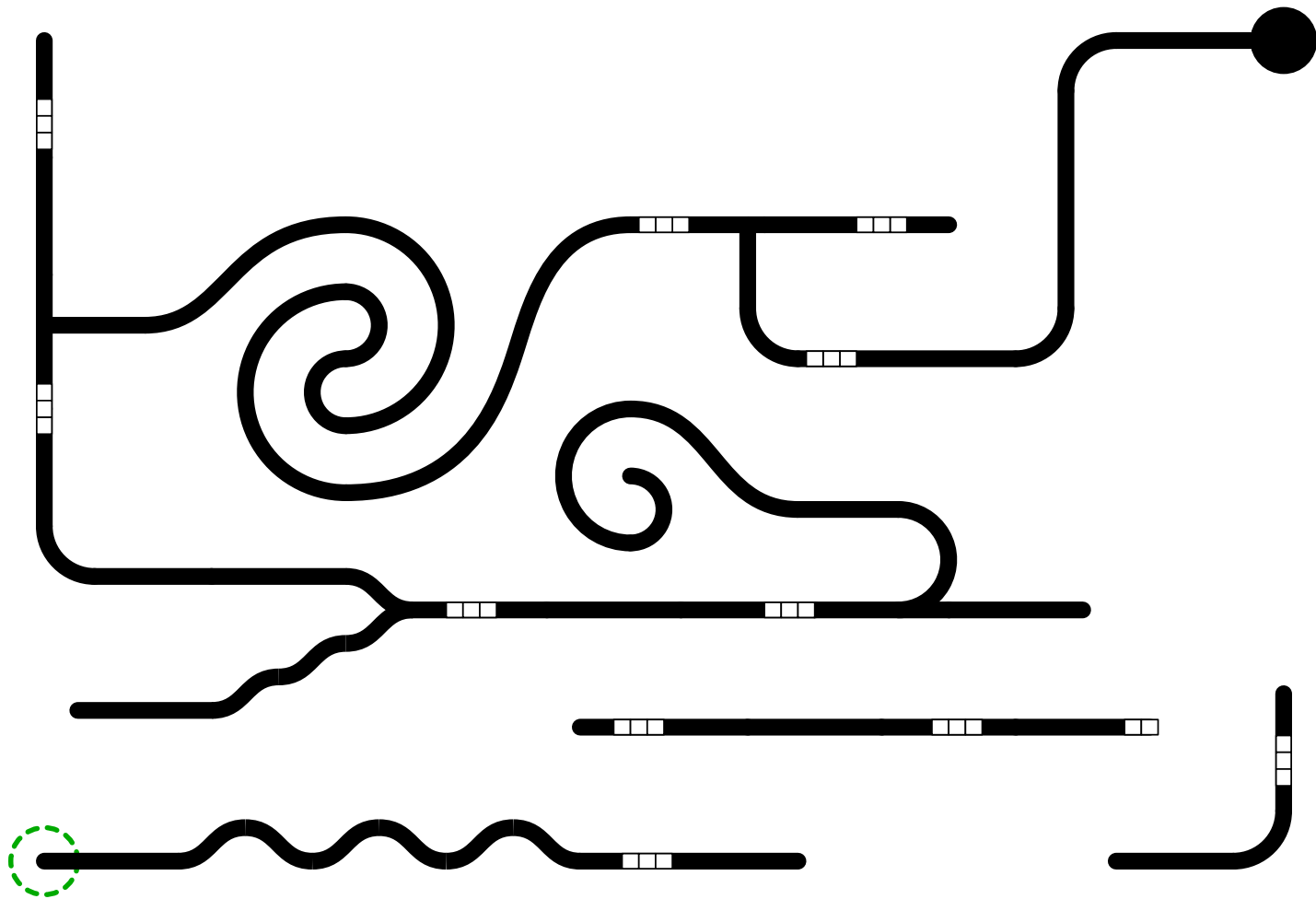














What's the word?

Start

End



S



N



T

R



A



Ozobot

Riferimenti on line



<https://ozobot.com/>

Step 1:

SET UP





Step 3:

TEACH YOUR STUDENTS

Find Basic Training and student handouts to get your class coding and creating fast.

Basic Training



Student Handouts



GOING FURTHER



Lesson Library

Over 150 lessons and activities



OpenBlockly Games

Robots not required!



Community

Get inspired by other educators

Other Resources

For Teachers



Ozobot Educator's
Guide



Curriculum Planner



Log Sheet



Student Tracker
(coming soon)

For Students



Color Code Chart



Color Code Chart:
Young Learners
Version



Color Code Tips



Calibration Tips



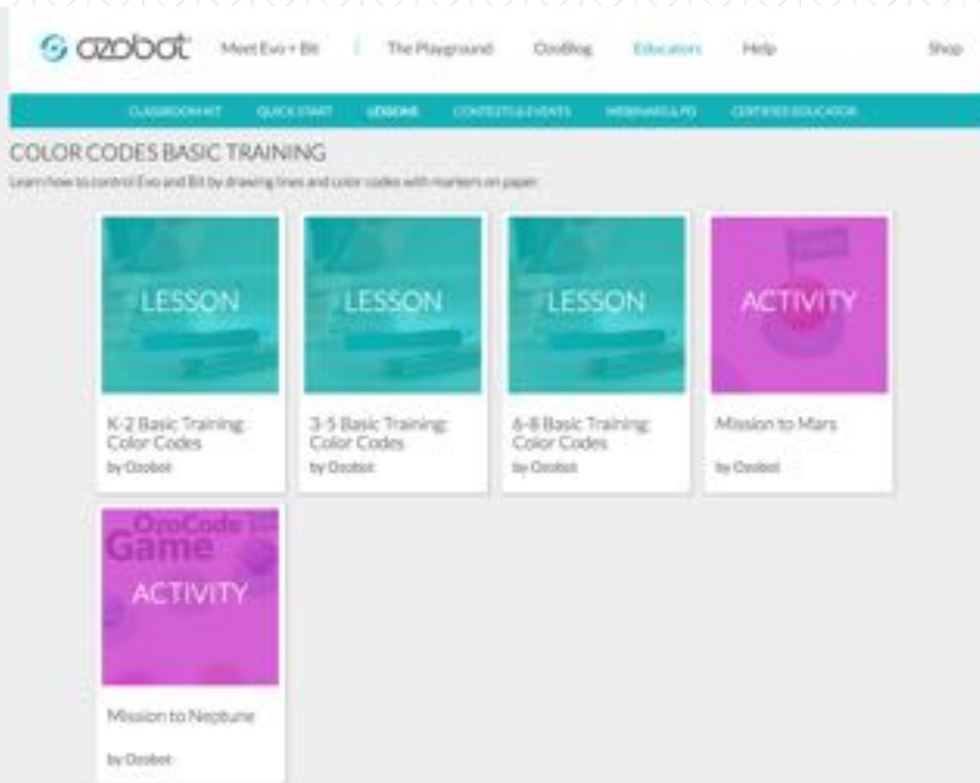
Student Certificates



Ozoblockly Tips

Ozobot

Riferimenti on line





The screenshot shows the Ozobot website's 'OZOBLOCKLY BASIC TRAINING' page. At the top is the Ozobot logo and navigation links: 'Meet Evo + Bit', 'The Playground', 'OzoBlog', 'Educators', 'Help', and 'Shop'. Below this is a teal banner with links: 'CLASSROOM KIT', 'QUICK START', 'LESSONS', 'CONTESTS & EVENTS', 'WEBINARS & IRE', and 'CERTIFIED EDUCATION'. The main heading is 'OZOBLOCKLY BASIC TRAINING' with the subtitle 'Program Evo and Bit using the visual programming language OzoBlockly.' Below this, a sub-heading 'OZOBLOCKLY BASIC TRAINING' is followed by the text 'Start here to teach your students how to use the OzoBlockly editor and load programs onto Bit or Evo.' Three lesson cards are displayed, each with a teal background and the word 'LESSON' in white. The first card is 'OzoBlockly Basic Training K-1 by Ozobot'. The second card is 'OzoBlockly Basic Training Grades 2-5 by Ozobot'. The third card is 'OzoBlockly Basic Training Grades 6+ by Ozobot'.

Ozobot

Meet Evo + Bit | The Playground | OzoBlog | Educators | Help | Shop

CLASSROOM KIT | QUICK START | LESSONS | CONTESTS & EVENTS | WEBINARS & IRE | CERTIFIED EDUCATION

Compilations / OzoBlockly Basic Training

OZOBLOCKLY BASIC TRAINING

Program Evo and Bit using the visual programming language OzoBlockly.

OZOBLOCKLY BASIC TRAINING

Start here to teach your students how to use the OzoBlockly editor and load programs onto Bit or Evo.

LESSON

OzoBlockly Basic Training K-1
by Ozobot

LESSON

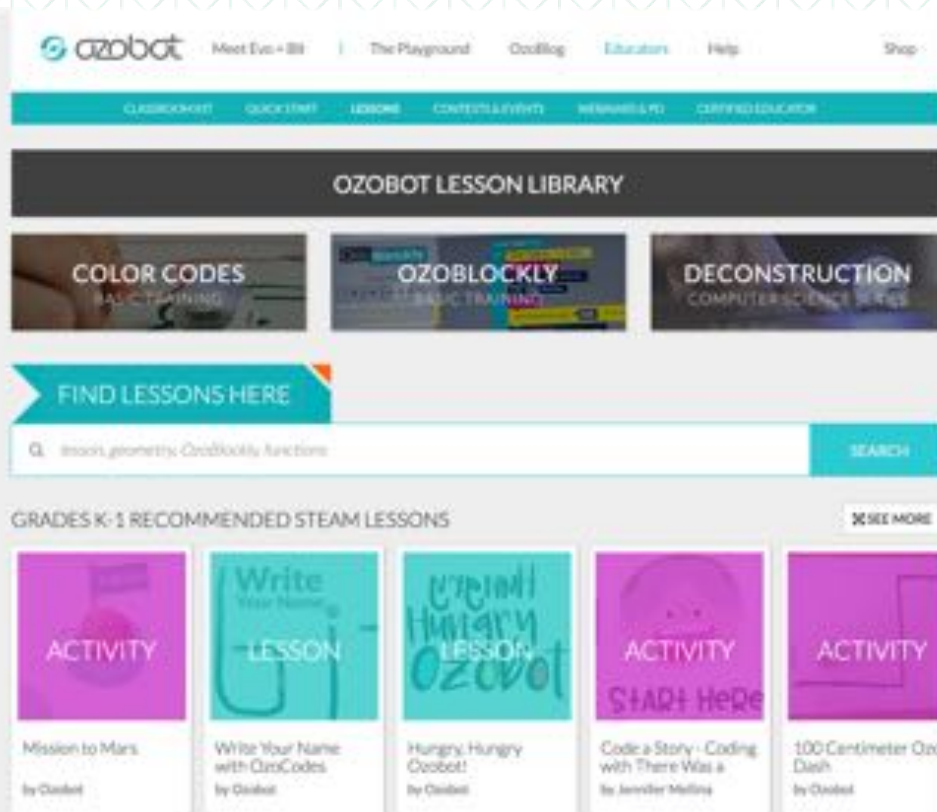
OzoBlockly Basic Training Grades 2-5
by Ozobot

LESSON

OzoBlockly Basic Training Grades 6+
by Ozobot

Ozobot

Riferimenti on line



GRAZIE.

flavio.renga@fondazione scuola.it

www.riconnessioni.it