





HONORING ANCESTORS

Grades	Ozobots	Coding Method
2-6	Evo or Bit	Color Codes
Pre-Reqs	Timing	Topics
Color Code	Research at home;	Culture, Art, History, Social Studies,
Basic Training	30 minute activity	Computer Science
Learning Outcomes: Discover the Mexican tradition of ancestor celebration in early November. Connect 'binary trees' to family trees. See patterns to code the tree map so Ozobot visits ancestors' branches. Resources: "22 Things about Day of the Dead" <u>bit.ly/2gW2JgG</u> Lesson Inspiration (for teacher) <u>bit.ly/2puomVT</u>		

Every year, Mexican cultures remember deceased family members with gifts and celebration on November 2nd, Día de los Muertos. Unlike Halloween, where spirits are scared away with masks, symbols and intimidating pumpkins, Día de los Muertos invites the spirits of the dead to participate in the food,

dancing, and music. This celebration helps keep memories of ancestors happy and alive.

Students will create their family (binary) tree, with branches for each family member, and draw or leave a gift at the branches for those who have passed on. These gifts can be drawings or items that reflect what each ancestor enjoyed in life. Students' challenge is to use the right codes to have Ozobot reach every branch it needs to.

LESSON STEPS

DAY BEFORE

- 1. Explain the task: Students will create their family tree on the binary tree map with lines to their deceased close relatives. Ozobot will visit each ancestor's branch (or 'altar'). Show students the Example Maps, attached.
- 2. Share the article (see Resources above) "22 things you might not know about the Day of the Dead" with students, as a printout or on a screen, to discuss comparisons between Halloween traditions to Día de los Muertos.
- 3. Students research their family (parents, grandparents, great grandparents) and what they liked (colors, foods, animals, items, places) by asking family at home. If students want to celebrate uncles and aunts or other family, they can draw out a family tree that has these family members' branches. Students may need help with this.

IN CLASS

- 1. Hand out one or two templates of the family binary tree to all, one for each side of the student's family. Students draw in the lines (keeping codes blank) to the family members they are celebrating.
- 2. Explain how Intersection Direction and U-Turn Codes are to be placed to make sure that Ozobot will walk from the first line and down every branch. You can black out codes. (See the Example Maps for the right Color Codes.)
- 3. Students plan, then code their trees, and decorate the 'altars' or leave gifts. Gifts could be small toys. (Note: if you put an object in front of Evo, it will stop moving then make a U-Turn which is fine at a line end.) Decorate your bot by sticking a sugar skull (attached) to the top so you can see it when looking from above.
- 4. Students can present how they coded their map, and any special decorations they've drawn or created to talk about their family. If students have family traditions of celebrating their ancestors (example, Mexican or Korean families), they can choose to share what their families do on these special days with the class.



















