



WINTER TRADITIONS PARADE

SUMMARY

Your students will discover holiday traditions from around the world, then engineer some cool holiday decorations for their bots to show off during a Holiday parade!

OVERVIEW

The Winter season is special all around the world, and each part of the world has their own special traditions. People celebrate with lights, harvests and presents from Asia to Africa to the Americas in this season. To help students discover more about other cultural traditions, and always with an eye on collaboration, Ozobot presents this fun and festive Winter holiday parade activity.

This activity will take two hour-long class sessions for the research, design, and parade itself. Pace this activity with your class any way that works best!

First, students (individuals or groups) will use a bot on a world map to receive a random country. Next, these students research a holiday tradition celebrated during Winter by a group of people in that country, and use what they've learned about the traditions to engineer a costume or prop for their Bit or Evo. Finally, students design an OzoBlockly program that helps show off their bot's decorations in a parade!

OUTLINE

1. Each group receives a country to study from a bot taking a "Random Walk" on a world map.
2. Students research a group of people's tradition in their given country with the worksheet, which can be historic or modern.
3. With lightweight and colorful materials, students make a draft, test then build a final prop or outfit for their bot to show off during the parade.
4. Students also design a program to get their bot to march for the parade.
 1. *Optionally, students can create a program to present their bot one at a time and explain the tradition their bot's prop or outfit represents.*

PREREQUISITES

- Experience with OzoBlockly. Check out the [OzoBlockly Mini Lesson](#) in our lesson library to learn how to use the code editor.
- To help students work in groups, you can do our lesson on [Pair Programming](#), or modify it to go over the topic quickly.

GROUPING

One to three students per bot and tablet

TOPICS

Geography, Social Studies, Programming, Art

MATERIALS

- A class set of Bits or Evos
- DIY skins for each bot
- At least 1 world map with country names to assign countries
- Copies of the attached Winter Tradition worksheet for each group
- Materials for decorating (stickers, paper crafts, glue (hot or quick dry), sequins, cardboard, toothpicks, etc).
 - Students can also bring materials from home for the second lesson.

GRADE LEVEL

Grades 1-6

DURATION

2 hours

QUESTIONS ABOUT THIS LESSON?

Please contact us at ozoEdu@ozobot.com

ACTIVITY

PREPARATION

For the **first hour** of this lesson, you will need:

1. 1 Bit or Evo,
2. printed copies of a world map with countries' names,
3. copies of the attached worksheet for each group,
4. at least 1 computer or tablet that can access ozoblockly.com/editor,
5. *(optional) if there's time for designing at the end of the class, also bring the materials students will use in engineering their prop or costume.*

For the **second hour** of the lesson, students will need:

1. a variety of lightweight materials in different colors
 1. colorful adhesives, stickers, paper or cardstock, toothpicks, popsicle sticks, blue tack, string and anything else you can think of!).
 2. students can also source materials from home that will fit their project.
2. tape or glue (you can use hot glue guns on the DIY skins),
3. bots and their DIY skins,
4. pens and pencils,
5. a tablet or computer for each group to access ozoblockly.com/editor

STEP 1 RESEARCH A TRADITION – 30-60 minutes

This whole step can take up the first lesson.

Explain to students that countries all over the world have their own Winter holiday traditions, and today we will use Ozobot to discover and display some of these unique traditions.

Set up a computer or device with ozoblockly.com/editor and bring up the Mode 4 Example called "Random Walk". Edit the program by removing the current loop block and replacing it with a 10 loop block. Or, visit this link (ozoblockly.com/editor#36d4ff), which has already been edited. If students are using their own devices in their groups or tables, task them with editing the program.

Set up the world maps on each table or use one on one table.

Run the program on a single Bit or Evo on the world map for each student or group to assign a country. If the bot stops off the map, play again until a country is chosen. It's okay to put the bot back on the map if it strays early on during the program.

Note that, for southern hemisphere countries, students can do local traditions in the country's seasonal winter, or any northern hemisphere tradition celebrated in that country from November to February.

Hand out the Winter Tradition worksheet (attached) to each student or group for collecting the information.

Send students to their computers to research a Winter holiday tradition in the country. Allow at least 20 minutes for students to find and choose the best information and complete the worksheet. The tradition can:

- a. occur between November and February (or May-August for southern hemisphere Winter traditions),
- b. be historical or modern,
- c. celebrated by any group in the country,
- d. be religious or non-religious.

Share the attached samples of Winter Holiday Traditions made at Ozobot HQ!

We recommend doing the drafting of the prop or costume with any remaining time in this first lesson. As with all engineering tasks, it's helpful to run through an idea, find the faults, and decide on ways to improve them before making the final product.

STEP 2 DRAFT THE PROP OR COSTUME – 30 minutes

This step, and the following step, can take up the second lesson.

Set up all of the materials to be used during the design of the props or outfits. If students brought their own materials, they can set them out on their tables.

Students begin by making a draft version of their prop or outfit from the design. As with all engineering tasks, it's helpful to run through an idea, find the faults, and decide on ways to improve them before making the final product.

Students fix any problems in the draft before starting to create their final product.

Students build their final prop or costume based on their designs and draft.

STEP 3 HOLIDAY BOTS ON PARADE – 20+ minutes

Hand out a tablet or computer to each group so they can use ozoblockly.com/editor to create a parade march for their bot. You can optionally predesign a march and have all students load the same program.

An example parade program for Evo is here (<http://ozoblockly.com/editor#97yzeu>). Remove the proximity sensor code for Bit.

Here are some tips for making parade programs:

1. Keep the speed under “fast” like a normal parade.
2. Add in “Timing” blocks for pauses.
3. If your class has Evos, program the proximity sensors to keep bots from tackling each other.
4. Use the “set wheel speeds” Movement block from Mode 4 to adjust individual wheels if the bot swerves.
5. Make the most of the light shows! Put the whole program in a loop so they lights can rotate. Also check out Mode 4 Lights “random color” blocks.

Bots on parade! The class can:

1. have all bots go on parade together as part of your own Winter Holiday party, or,
2. have groups or students individually march their bot and share
 - a. their selected country,
 - b. the specific tradition they chose,
 - c. and explain the prop or outfit’s design and significance of the details (colors, shapes, symbols etc).

Optionally, you could even have students collaborate to decide what order they will present their traditions, then program each bot to step out of the parade one at a time to allow students to present their tradition.

OZOBOT WINTER TRADITIONS WORKSHEET

WHAT COUNTRY?

Name: _____

WHAT TRADITION?

You can search "Winter holiday traditions in [your country's name]"

Name of tradition: _____

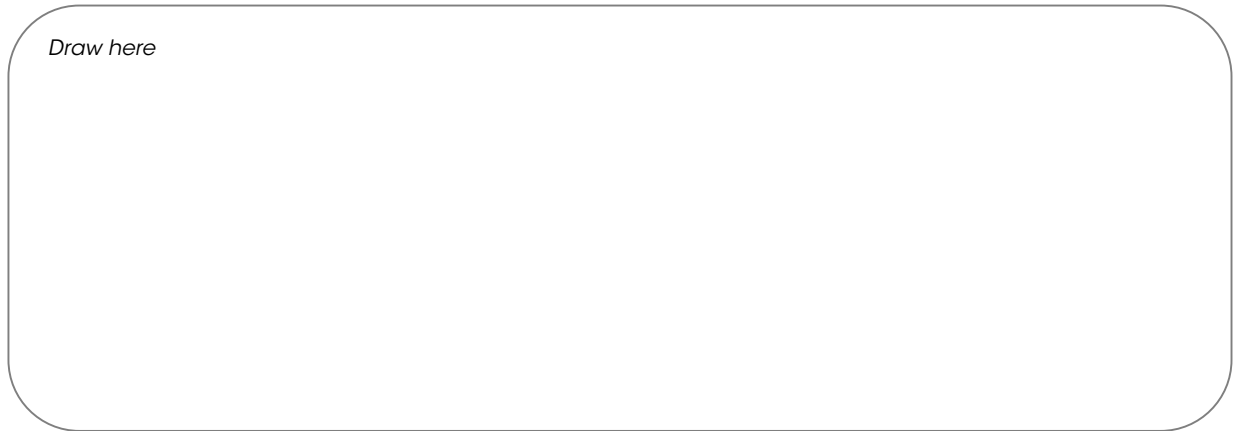
Who celebrates this tradition? _____

When do they do it? _____

Describe what people do for this tradition: _____

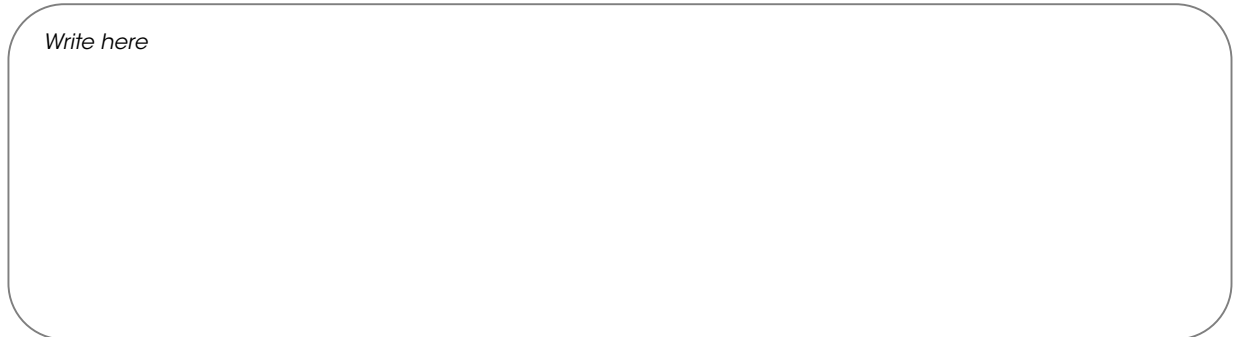
WHAT IS YOUR DESIGN?

Draw here



EXPLAIN YOUR COSTUME OR PROP

Write here



WINTER TRADITIONS PARADE SAMPLES

