

Hardiness Zones

Victory Garden Series Part 2

GRADES:

4 - 12 (refer to suggested modifications at the end of this document)

DURATION:

Varies depending on the level. This can be done in one day. This activity is part 2 of the larger series on Victory Gardens. You can find the other parts [here on The Teacher's Toolbox, our education blog](#).

LEARNING OBJECTIVES:

- Children will have a basic understanding of hardiness zones.
- Children will know what hardiness zone they are in.
- Children will understand how hardiness zones affect what plants they are able to grow.

MATERIALS:

- Internet connection for visiting websites
- "Zoned Out" worksheet, attached

BACKGROUND INFORMATION:

For Children

Think about the kinds of plants you see growing in your neighborhood. If you live in Ohio, there is a good chance you aren't going to see an orange tree or a palm tree lining your street. Why is that?

*Different plants need different growing conditions. Some like it cooler, others need really hot weather with a lot of sun. When we are planning a garden, it is important to know what kind of plants will thrive in our area so we have a successful garden. To help gardeners know exactly what kind of plants they can grow for their climate the United States Department of Agriculture created **hardiness zones**. A hardiness zone is a geographic area that has particular growing conditions. These zones are based on the annual minimum temperature. The United States has thirteen hardiness zones. Each zone is separated by 10 degrees. Zones are also sometimes followed by a letter "a" or "b". This divides the zone into even smaller increments, by 5 degrees.*

Hardiness zones were first talked about in the United States in the 1920s, but it wasn't until the 1960s that the system we use today was created. The hardiness zone map we use today was created in 2012 and is based on temperature recordings taken from 1976 to 2005! Before that the last time the hardiness zone map was updated was 1990.

ACTIVITY OUTLINE:

1. Talk to your child about hardiness zones or have them read the background information on their own (refer to the Background Information above).
2. After the initial research or instruction, ask some questions to assess if the main concepts were understood

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3. Children will then complete the “Zoned Out” worksheet. By completing the activities on the worksheet they will understand what zone they are in as well as learn if they are able to grow some of their favorite fruits and vegetables in their zone. This will help them decide what to plant in their Victory Garden!

ADAPTATION FOR EACH GRADE:

4th and 5th graders will need more adult assistance with this activity. Middle school and high school students should be able to do the majority of this activity with minimal assistance.

EXTENSIONS:

1. Check out this [interactive map](#) to see how the hardiness zones have changed since 1990. Some of the changes are due to more accuracy in reporting and larger data sets, but some of it is due to climate change.
2. Now that you’ve mapped your garden, time to go to Part 2 – Map Your Victory Garden.

ONE MORE THING:

Let us know how it went! Tag us on social media or email us at education@ohiohistory.org.



Zoned Out

DISCOVER YOUR ZONE:

Complete the following questions to learn more about your hardiness zone so you know what kinds of fruits and vegetables you can plant in your Victory Garden

1. List your city, state, and ZIP code
2. Visit the [Arbor Day website](#) to find your hardiness zone.

My Zone is:

3. What are some of the other states in your zone?

FRUITS AND VEGETABLES I LIKE:

- List all the fruits and vegetables you like to eat.
- Find out what is the best zone for growing those types of plants (tip: we Googled “hardiness zone for oranges” to find the answer below!)
- Is this something you can plant in your Victory Garden? Why or why not?

Name	Zone	Can I Plant It Here?
Oranges	9-11	No, it's too cold here!

