



# THE BEAUTIFUL AND LOUD PERIODICAL CICADA 2021



"Another Periodical Cicada" by treegrow is licensed under CC BY 2.0

## Interesting Facts and Activities to go with them:

1- Periodical Cicada develops through 5 instars (stages) as a juvenile. We might say people do too!

- Draw yourself at various stages as a juvenile (youth). Compare how you look to how the juvenile cicada looks.

Baby

Toddler

Elementary

Middle School

High School

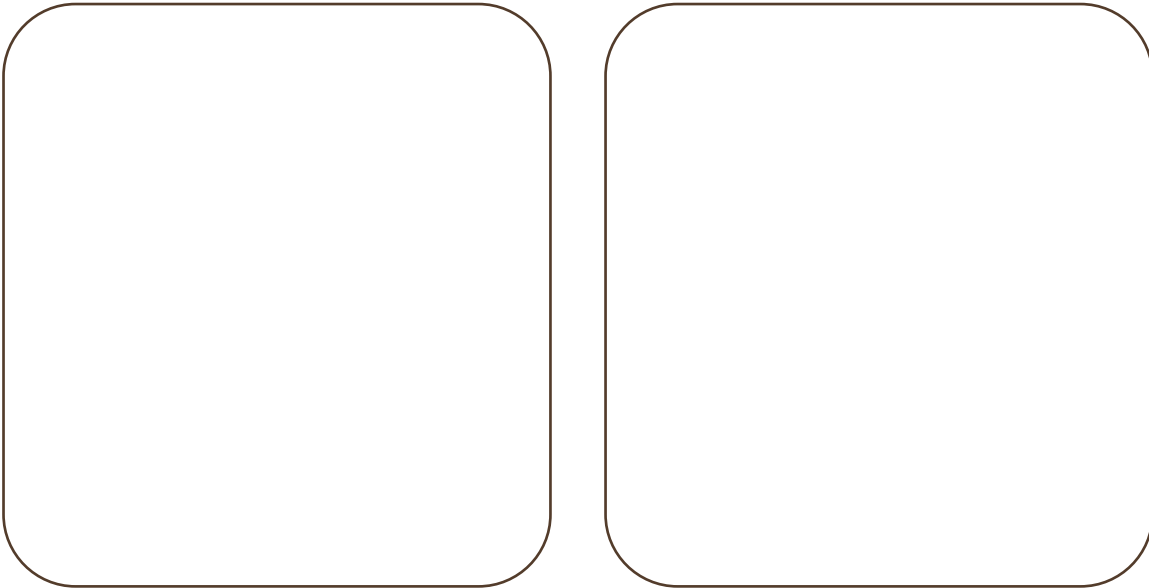
This is  
ME! →

This is  
the Periodical  
Cicada →



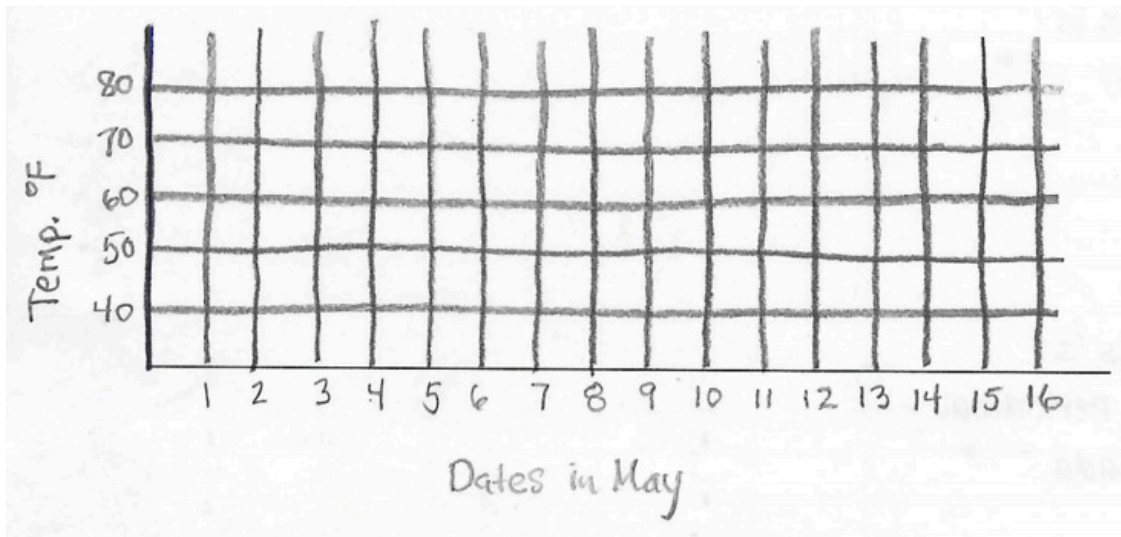
2- The Periodical Cicada stays as a juvenile (a kid) underground for 17 years!

- In the book Cecily Cicada by Kita Helmetag Murdock and Patsy Helmetag, two pages show the silly things that Cecily did while waiting to grow up! Can you think of something else Cecily might do while waiting to grow up? Draw and write about it here.



3- When the ground temperature is 64\*, the cicada's body will warm enough to emerge from the ground.

- Make a graph of the outside temperatures. The air temperature will have to be warmer than 64\* to heat the cold ground to 64\*.



- When daytime temperatures seem to stay warm, you can find evidence of the cicada getting ready to emerge. Find a tree or a forest of trees that appear to be at least 20 years old. Look at the base of the trees. See if you can find cicada chimneys, or turrets. They look like tiny mounds of dirt before the cicada leaves the ground. Count them. Lift one up. Can you see the cicada inside?

Cicada Turret



TALL Cicada Turret



“We dug a hole today and uncovered even more cicada nymphs underground. They live pretty deep in the earth and survive by eating the sap in tree roots. Before they emerge they build little ‘escape chimneys’ out of mud, it was very freaky seeing all these” by ChrisHamby is licensed under CC BY-SA 2.0

“Cicada Mud chimney or turret IMG\_9629” by johnrmangold is licensed under CC BY-NC-ND 2.0

I counted \_\_\_\_\_ turrets today. I peaked under one of them and found \_\_\_\_\_

- Once the cicada emerges from the ground, you can find holes in the ground. These holes are good for the grass and trees. ● They give them air. Count all the holes you can ● find. ●

I counted \_\_\_\_\_ cicada holes under the trees at \_\_\_\_\_!



"Brood V 17 year Magicicada periodical cicadas" by dankeck is marked with CC0 1.0

4- Usually after sunset, the Periodical Cicadas will emerge from the ground altogether. There will be thousands of them. This is how they protect themselves. No animal can eat ALL of them! Many are eaten, but even more survive. They don't have other defenses. They don't bite or sting and they are not venomous.

- Keep your eyes open! Birds, spiders, cats, squirrels, bats, wasps, praying mantises, fish, dogs, and even PEOPLE have been known to eat the Periodical Cicada. Make a list of all the animals you see eating the Periodical Cicada. Take a picture.

Here's my list of animals I saw eating the Periodical Cicada...

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.



- If you could give the Periodical Cicada a superpower to defend itself, what would you give it? Describe how the cicada would use that superpower.

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5- The newly emerged cicada crawls up the nearest tree. Then it stops and sheds its skin (molts). The exoskeleton left behind is called an EXUVIA. Can you say that?

- “Everyone excitedly examines the exuvia!” Try to say that 5 times fast!
- Collect exuviae. You will find them wherever the cicadas (or cicadae) molt. Paint with neon colors. Maybe add glitter. Hang as ornaments from a tree.



“I’ll be leaving my exuvia here. Don’t be fooled. I’m not inside,” said the adult cicada.

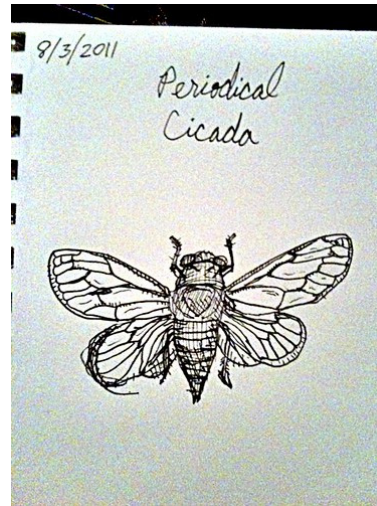
“17-year periodical cicada (*Magicalcicada septendecim*) nymph” by Futureman1 is licensed under CC BY-NC-SA 2.0

6- The changed cicada has wings and is white. As its body hardens, it darkens.

- Color the cicada on the right to show its new color (red eyes, black thorax and abdomen, clear wings).



“Periodical Cicada, Brood II, May 2013” by Armed Forces Pest Management Board is licensed under CC BY-NC-ND 2.0



“Yesterday’s drawing: Periodical Cicada #1drawingaday” by DanAllison is licensed under CC BY-NC-SA 2.0

7- Male cicadas gather to sing a chorus to attract a female. They use organs called tymbals, which are located on the sides of their abdomens. Males are the only ones who sing, and they are LOUD! Decibel meters have shown they can be as loud as a rock concert.

- Get a group of friends or family members together and create your own chorus. Compete with other groups to get new members to join your group.

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8- The female cicada responds to the male's chorus by clicking her wings to show she is interested in him. It sounds like a person snapping his or her fingers.

- If you find a male cicada, you can snap your fingers just once and watch him follow your hand. Snap behind him, and he will turn around. He may land on your hand. Don't worry if he does. Remember he can't hurt you.

9- Females will lay 200-600 eggs in the tender twigs of branches. The nymphs will hatch after 2 months, crawl out of the twig, and fall to the ground. They will burrow underground and find a place near a root where they can suck the juices for 17 years.

- Sometimes people worry that their trees will die because of the cicada, but the cicada depends on a living tree to support it for 17 years. If you have young trees, you can cover them with netting to protect them from harm. Females will choose the tender twigs of older trees, which are hardier.
- If you find cicadas in your yard, make sure you take a picture with them next to their favorite tree. You will be an adult the next time you are able to take that picture. Print your picture and tape it here.

10- A cicada is not a locust. Here is a locust.



Locust

11- For more fun information and videos about the Periodical Cicada, check out [cicadamania.com](http://cicadamania.com).