



Draw the Lines

Dear Educator –

We hope that this note finds you healthy and safe. As the education community navigates this new world of virtual and home-based teaching, we at Draw the Lines believe we can help provide an informative and challenging online resource for your students no matter where they are located.

For more than two years Draw the Lines has brought civics to life for over 10,000 Pennsylvanians, the majority of them students, who have participated in our unique civic engagement project through daylong events, during individual classroom sessions, and on their own.

To meet the challenges we currently face, we have tailored our program to use as a classroom exercise for high school and college students online and at home. The heart of the program, which focuses on understanding gerrymandering, is the online platform that allows participants to draw their own Congressional election maps.

A Draw the Lines activity packet with a mapping platform user guide, virtual classroom exercises, and web links to instructional videos is attached.

For high school educators, Draw the Lines is recommended as an Act 35 Civics Skills resource by the Pennsylvania Department of Education. Draw the Lines also offers free Act 48 certified credit through our hour-long training sessions. We are happy to schedule these individually with you.

If there is anything else we can do to help bring Draw the Lines to your online classroom, we can be reached at info@drawthelinespa.org. We also are available to conduct Zoom sessions for your students or teachers or faculty.

Thank you. Stay healthy and safe.

The Draw the Lines team



Web videos: What is gerrymandering?

ESSENTIAL QUESTION:

What is redistricting?

TIME COMMITMENT:

5-15 minutes

LEARNING OBJECTIVES:

1. Explain how voters are apportioned in voting districts.
2. Explain what gerrymandering is and why politicians have an incentive to do it.

PA STANDARDS MET:

5.2.(class).C. - Political leadership and public service

5.2.(class).D. - Citizen's role in political process

Introduce the concept of redistricting and gerrymandering with one of these three short web videos.

"[Gerrymandering, explained](#)" by the Washington Post (2:41 run-time)

"[Gerrymandering: How drawing jagged lines can impact an election](#)" by TED-Ed (3:52 run-time)

"[Gerrymandering: Crash Course](#)" by PBS Digital Studios (7:57 run-time)

Then ask students to do a 3-2-1 video analysis.

- What are 3 facts you learned from the video?
- What are 2 images that stood out to you?
- Create / Ask 1 question based on the video.

(Want some further tips on using a 3-2-1 activity in your class? Use this [website](#).)



Why does redistricting matter: Flashes of Insight

ESSENTIAL QUESTION:

What values matter when drawing election maps?

TIME COMMITMENT:
10-15 minutes

LEARNING OBJECTIVES:

1. Identify the different values that determine what a district looks like.
2. Understand that there are tradeoffs for prioritizing different values.

PA STANDARDS MET:

5.2.(class).D. - Citizen's role in political process

5.3.(class).E. - Different processes for state, federal elections.

7.2. - Physical characteristics of places and regions

7.3. - Human characteristics of places and regions.

View the [10 Flashes of Insight](#) flashcards that highlight the many values that can be prioritized when a voting map is drawn.

Make sure everyone understands what each value means.

Have each student rank the values that they would prioritize if they were drawing their own map.

Then return as a group and discuss what students prioritized. Ask them to explain why they ranked the values the way they did.



Help students understand that there are two primary takeaways:

There is no one correct way to draw districts. Different values require trade-offs. For example, to make a competitive district, you may have to forego compactness.

Extension questions:

- How did you think about 'communities of interest'?
- Do you think it's important for a map to intentionally create districts that are competitive in elections? Or should districts be drawn without considering previous election results or voter registration data?
- What values are enshrined in US law ([Voting Rights Act](#) and [Reynolds v. Sims](#)) and the [Pennsylvania Constitution](#) (Article II, Section 17)? How did you think about those in relation to others that are not enshrined?



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How to draw a redistricting map

ESSENTIAL QUESTION:

How can I use the same digital tools as the political pros to draw a map of Pennsylvania's voting districts that isn't gerrymandered?

TIME COMMITMENT:

1 hour (starter map)
2-6 hours (blank map)

LEARNING OBJECTIVES:

Understand how to draw a congressional map that represents values that are important to students.

PA STANDARDS MET:

5.2.(class).D. - Citizen's role in political process

7.2. - Physical characteristics of places and regions

7.3. - Human characteristics of places and regions.

15.4.12.B. - Behavior of digital citizenship

15.4.8.D. - Projects using emerging input technologies

What better way to learn about redistricting than by drawing your own congressional map??

First, all finished maps are eligible for the Draw the Lines mapping competition. [See the rules for the PA Congressional Mapping Competition here.](#) Students can win up to \$5,000 for their map.

There are two ways to get oriented to the DistrictBuilder mapping tool: a written [User Guide](#), and this [instructional video](#).

The mapping platform works well on computers, laptops, and tablets. It does not work well on phones.

There are two methods to drawing a map. We have help for both:

- Drawing a map from scratch (2-6 hours)
- Finishing a nearly completed starter map (about an hour)

Please note: **a Draw the Lines team member is often available for a virtual session to demo the platform with students.** Please contact us info@drawthelinespa.org to request more information.

Teachers, we can work with you directly to figure out the best way for you to access your students' maps and personal statements after they are submitted. Again, please contact us at info@drawthelinespa.org so we can make arrangements with you.



Draw the Lines

Drawing a map from scratch

Have students go to our [Draw a Map](#) page. They should refresh what they prioritized in the Flashes of Insight exercise.

Then go to the red “Draw a map” box and click to get started. They will be taken to DistrictBuilder. They can sign up for a free account using their email address.

Once they have logged in, now is a good time for you to show them [DTL’s demo video](#) for how to use the platform.

Once students have drawn their maps, they will be prompted to complete a [personal statement](#), explaining their map. These statements can take any format, from a written essay to a video to an audio recording. We encourage creativity. Students will be able to upload their statement in the Submit forum.

Once students have completed their map, we ask that they complete [DTL’s short survey](#).

After completing their maps, have students give a brief overview of their map to the class. They can consider the following questions:

- What redistricting values did they consider when drawing their map?
- How did they use these values to help them map their districts?
- How did they learn about and map parts of the state that they aren’t familiar with?
- Do they think their map is better than the map adopted by the [state in 2011](#)? Do they think it’s better than the map adopted by the [State Supreme Court in 2018](#)? Why?



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Finishing a nearly completed starter map

This option allows your class to start with a mostly complete map and just finish the final few districts. They will still learn how use data to make their map and how to make tough decisions to achieve their goals, without having to commit several hours to completing a map from scratch.

Have students create a free account on [DistrictBuilder](#). Then, using the Flashes of Insight exercise as their guide, students should choose which of the following values matters most to them:

- Compactness
- Competitive elections
- Equal population

After logging in, they'll reach the "Choose a Map. Start Drawing" page. In the #2 box, they'll select their map type. Click on the "Shared" tab on the left side of the screen. There, they will see a list of starter maps to choose from, featuring both a priority and a region to map.

Map Name	Author
Competitive starter map for Allegheny County	jvillere_test
Competitive starter map for Southeastern PA	jvillere_test
Compactness starter map for Central PA	jvillere_test
Compactness starter map for Western PA	jvillere_test
Compactness starter map for Philadelphia	jvillere_test
Equal Population starter map for Allegheny County	jvillere_test
Equal Population starter map for Central PA	jvillere_test
Equal Population starter map for Philadelphia	jvillere_test

Once selected, this is a good time to show them [DTL's demo video](#) for how to use the platform.

Some questions you can ask to guide the discussion as they map:

- Does our region have a natural dividing line that we should use as a district boundary?
- Are there neighborhoods that should be kept together in the same district? Why?
- If we maximize the metrics of our top goal, what metrics might worsen?

Have the students scan the rest of the map outside their region. Are there any districts they want to change? Any metrics for a particular district they want to improve?

Once the map is done, students can complete the personal statement in the submission form, talking about why they drew their map the way they did and how they accomplished their goals.

Once students have completed their map, we ask that they complete [DTL's short survey](#).

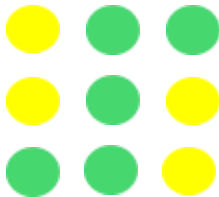


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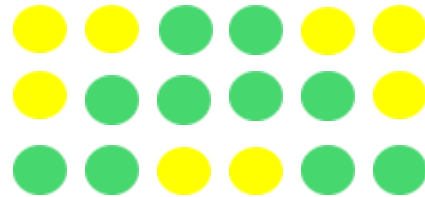
Gerrymandering 101

Let's pretend you work as a paid operative for the Yellow Dot Party. Your party controls your state's redistricting process. That's good for your side, but you have a problem. Your foe, the Green Dot Party, is growing. It actually has more voters now. Your assignment is to draw election boundaries that make sure the Yellow Dot Party can still win more seats in the next election. You'll do this by "packing" green dots into as few districts as you can, while spreading the rest of the Greens out over districts where yellow dots keep a majority (i.e. "cracking"). **For each puzzle, draw lines around dots to create your districts.** Two rules: 1) Each district must have the same number of dots. 2) Each dot in a district must be next to at least one other dot in that district.

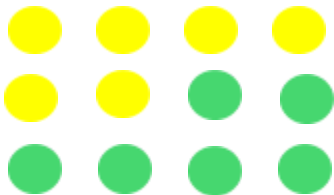
1) Create 3 districts (each with 3 dots). But make sure the Yellow Party wins 2 out of 3 districts - even though Green has more voters. (Hint: First draw one district with ALL green dots.)



4) Here's an area where the Yellow Party is in the minority (10-8) and its voters are scattered around the region. See if you can create 3 districts of 6 dots each so the Yellows can still win 2 out of the 3 seats.

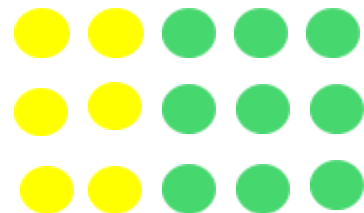


2) The state grows to 4 districts (each with 3 dots) Draw a map where the Yellow Party wins 3 of the 4 districts, even though Green has the same number of voters.



BONUS: Draw boundaries for **five districts** (3 dots per) in two different ways. First, draw them to cut the best deal possible for the Yellows.

Then, pretend that the Green Dot Party made you a better offer and you switch teams. Try drawing the best 5-district map possible for the Greens.



3) In a growing state, the Green Party now leads the Yellows, 9 voters to 6. Draw **5 districts** (with 3 dots each) in a way that gives Yellows a 3-2 seat majority.

