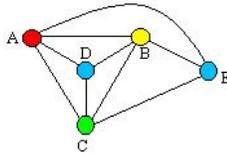
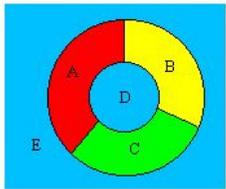




Map Coloring

Map coloring is a fun opportunity to problem-solve and strengthen mathematical thinking. Maps are easier to read when regions are shown in different colors. Maps help us visualize where objects are in relation to one another, developing our spatial thinking skills. Explore the creative side of math.

Math

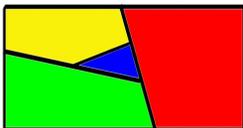


- Mathematicians try to figure out the fewest number of colors they can use to color a map, so that no touching areas are the same color.
- The **Four Color Theorem**, the first mathematical proof using computers, states you never need more than four colors to color in the regions of a map.

Rules

1. Each region should get exactly one color
2. Use as few colors as possible
3. When two areas touch along a side, they need to be different colors
4. If areas only touch on a corner, it's okay for them to be the same color

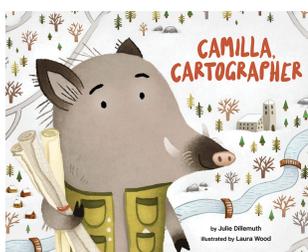
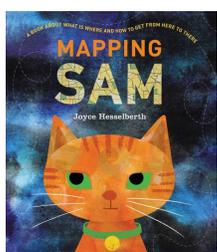
Tip



- Plan your map using beads of different colors. Place them where you would color on the map. If you change your mind you are only moving the beads around.

Inspiration

- Consider drawing maps of familiar places, such as your bedroom or a favorite playground.
- Zoom in on your neighborhood using Google Maps and look for key landmarks.



Maps are often found in stories. It's fun to see if you can make your own.

Meet *Camilla, Cartographer* and celebrate discovery, adventurous problem-solving, and making maps. Go on a nighttime adventure with *Mapping Sam* and learn about different types of maps.

DROP-IN STEM

Map Coloring

Color this map using the greedy algorithm.



What is the Greedy Algorithm?

The Greedy Algorithm is a technique where you color as much as you can with one color before moving on to another color.



DROP-IN STEM

Map Coloring

Draw a Squiggle Map of your own.



What is a Squiggle Map?

Every squiggle map can be colored with just two colors.
Draw a long, curving line that goes anywhere on the paper.