Daisies and Brownies complete 3 activities, Juniors and up complete 4 to earn your Polar Patch!

**Polar Animals**— From penguins in Antarctica to puffins in the Arctic, there are so many amazing creatures that live in polar climates. With your friends, brainstorm a list of animals that live in each region. Start by sorting these out, then add more: penguin, polar bear, caribou, walrus, orca, seals, narwhal, beluga, snowy owl, albatross. Do any of these animals live in both polar environments? Choose one polar animal to find out a cool fact about and share your new knowledge with a friend. You could also create a story or art piece starring your polar animal!

**Magnetic Poles**— Did you know earth has a magnetic field? Use magnets and a compass to map the magnetic fields and identify the north and south poles of magnets. Instructions are available here: [https://nationalmaglab.org/images/education/magnet_academy/searchable_docs/activities/draw_field_lines.pdf](https://nationalmaglab.org/images/education/magnet_academy/searchable_docs/activities/draw_field_lines.pdf)

**Polar History**— Like the rings of tree trunks record a history of a tree’s experience, an ice core can tell researchers a lot about what that area of a glacier experienced. In a year with more snow, the ice layer will be thicker. Some layers may have dust or debris indicating forest fires, volcanic eruption or other events. Troop leaders or parents can use this resource to create an ice core that can be studied by girls. [https://byrd.osu.edu/sites/default/files/recordinghistoryv10.pdf](https://byrd.osu.edu/sites/default/files/recordinghistoryv10.pdf) If you have a chance to visit the edge of a glacier you may be able to see the lines indicating the different year’s growth. If you do visit a glacier, make sure you take safety precautions as glaciers can calve and break off.

**South Pole Living**— What is it like to live for a few months at a research base on Antarctica? Find out by talking to someone who has been there; Check out our January Virtual Program. If you can’t talk with someone who has been there, try watching a video like this one by where the New York Times takes you on a virtual tour of the McMurdo Station. [https://www.youtube.com/watch?v=nZr5MJuNcXU](https://www.youtube.com/watch?v=nZr5MJuNcXU)

**Polar Lights**— The aurora borealis (northern lights) and aurora australis (southern lights) are beautiful displays not seen in the equatorial regions of the world. Learn more about what causes the northern and southern displays and why the polar regions are most likely to see their skies light up. [https://spaceplace.nasa.gov/aurora/en/](https://spaceplace.nasa.gov/aurora/en/) Use this site by the Geophysical Institute to find out when we are likely to see an aurora and then spend some time outside on a clear evening and see if you can spot it. [https://www.gj.alaska.edu/monitors/aurora-forecast](https://www.gj.alaska.edu/monitors/aurora-forecast)

**Penguin Day**!—January 20th is National Penguin Awareness Day. Celebrate penguins with one or more of the following ideas. Watch a penguin movie, create a penguin costume and make up a fun penguin skit, learn about a new kind of penguin (have you heard of a yellow-eyed penguin or a fairy penguin?), create life size drawings of different kinds of penguins (emperor penguin—48 in, Gentoo penguin—30 in, Rockhopper penguin 22 in), or come up with your own way to celebrate!

Order your patch online here: [https://www.cognitoforms.com/Girlscoutsalaska/GSAKPatchOrderForm](https://www.cognitoforms.com/Girlscoutsalaska/GSAKPatchOrderForm)

Questions? Or need a paper form? Contact Kelly FitzGerald at kfitzgerald@girlscoutsalaska.org