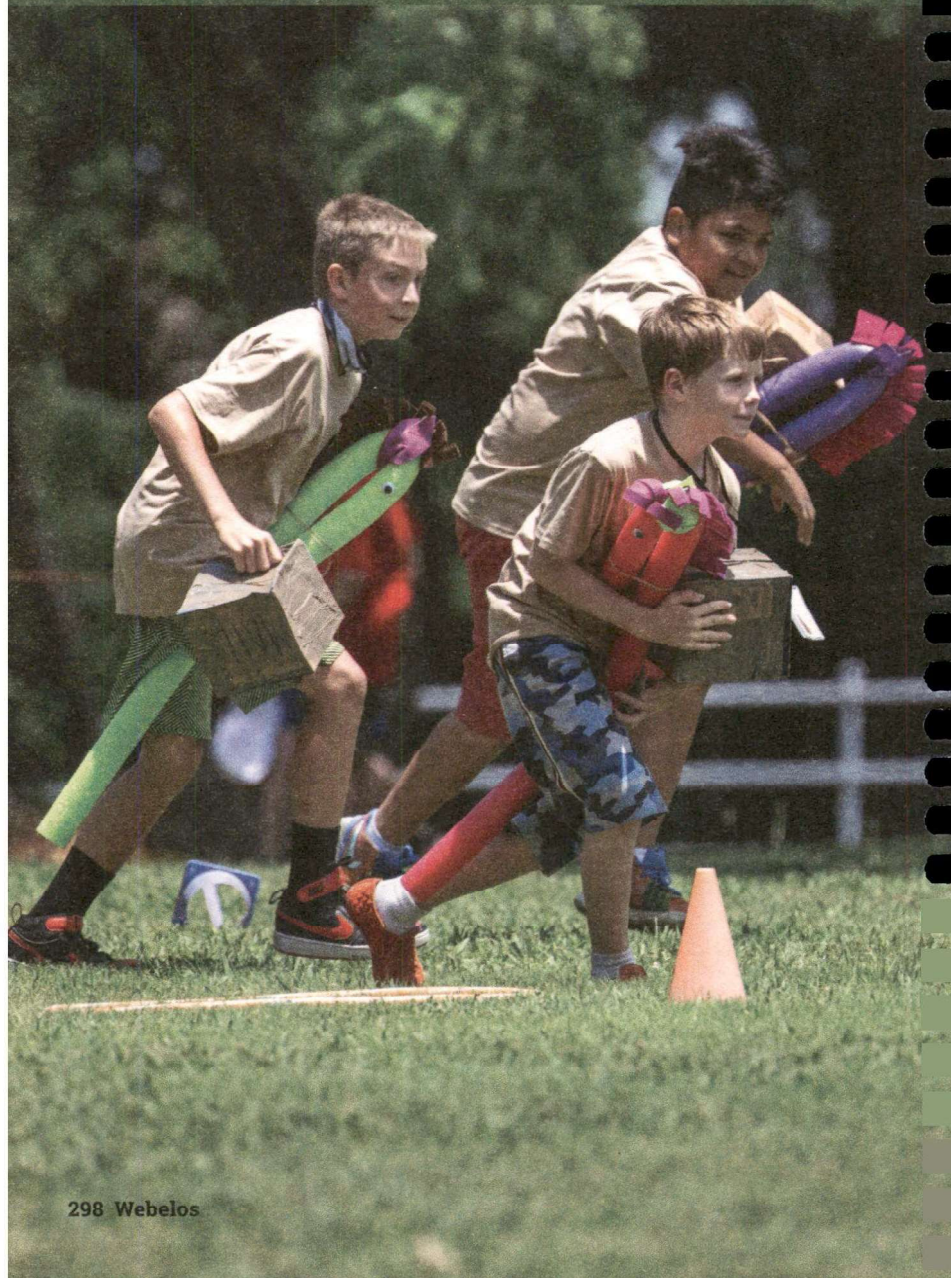


SUMMERTIME FUN

ELECTIVE ADVENTURE



SNAPSHOT OF ADVENTURE



The summertime is a great time to get together with your den or pack. The requirement for this Adventure is simple. Participate in three Cub Scout activities during the summer months. This can be at council-organized camps like day camp or resident camp, or it can be a den or pack get-together for a summertime picnic.

To earn this Adventure as a Webelos, you participate in summer activities during the summer after you have completed third grade. If you're just now learning about this Adventure, don't worry; the requirement to earn it as an Arrow of Light Cub Scout is exactly the same.

REQUIREMENT

Approved by _____

1. Anytime during May through August, participate in a total of three Cub Scout activities.



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Anytime during May through August, participate in a total of three Cub Scout activities.

The summer is filled with fun Cub Scout activities. Below are just some things you, your den, or pack may choose to do.



Cub Scout Day Camp

Cub Scout day camps are held by local councils. Adults who serve as leaders for this camp are trained to put together fun activities. Day camp may be three to five days. Each day

you arrive for a day filled with adventures and come home to share with your family what you did.

Cub Scout Resident Camping

Cub Scout resident camping is held by local councils. Adults who serve as leaders for these camps are nationally trained and certified in all areas of the camp. Resident camping is over several nights, as you stay at camp the whole time sleeping in a tent or other shelter with a parent or legal guardian.





A Pack-Organized Event

Pack events during the summer may include a fun day at the park, a trek on a local trail, or a back-to-the-pack event right before school starts — or may even be an overnight campout.

A Den-Organized Event

It can be fun to have your den get together for a visit to a museum or zoo or even a baseball game.



TECH ON THE TRAIL

ELECTIVE ADVENTURE



302 Webelos

SNAPSHOT OF ADVENTURE



Getting outside is a fun part of being a Cub Scout. Using technology outdoors can be an important part of helping you explore the world around you.

REQUIREMENTS

Approved by

1. Discuss how technology can help keep you safe in the outdoors. _____
2. Explore Global Positioning System (GPS) devices and how to use them. _____
3. With an adult, choose an online mapping program tool and plan a 2-mile trek. _____
4. Take your 2-mile trek. _____



- Elective Adventure
- Scan for this Adventure page

REQUIREMENT 1

Discuss how technology can help keep you safe in the outdoors.



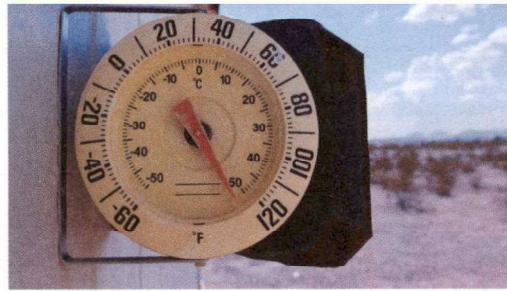
Technology is part of our lives at home and at school. Have you ever thought about technology in the outdoors?

An important technology that has been continuously improving is the ability to predict and track the weather. Knowing what the weather will be like for your trek allows you

to know what type of clothes to wear. Knowing the weather forecast also allows you to make the most important decision of all: rescheduling the trek for another day when the weather is predicted to be severe.

In 1870, the National Ocean and Atmospheric Administration (NOAA) was established in the United States. NOAA's mission is to provide daily weather forecasts, severe storm warnings, climate monitoring to fisheries management, coastal restoration, and the supporting of marine commerce. For over 150 years, the United States has used technology to record and predict the weather. The more data and information NOAA gathers on the weather, the better their predictions become.

Instruments like thermometers that measure the temperature and barometers that measure the air pressure were invented in the 1600s. These two instruments are key to predicting the weather. In 1909, NOAA attached small thermometers and



barometers to a balloon to track the air temperature and pressure at high altitudes. With airplanes, data

can be more accurately recorded. But NOAA and other weather services worldwide still use daily radiosonde balloons to collect detailed data.

Computers aid in the collection of weather data and help build weather models that more accurately predict the weather. The use of radar combined with computers allows NOAA to track the difference between rain and fog and can even count the number of lightning strikes in a storm.

When the United States established the National Aeronautics and Space Administration (NASA), we were able to use satellites to take photos of the Earth for the first time. Launching the satellites allowed for more data to be gathered on weather patterns.

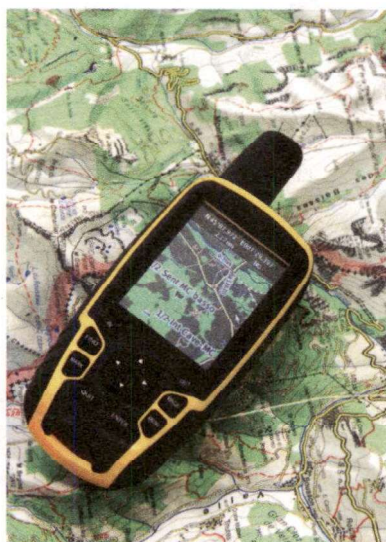
Today, NOAA operates supercomputers that collect, process, and analyze billions of observations from weather satellites, weather balloons, buoys, and surface stations around the world. All this power is now on mobile devices to give you the best prediction of what the weather will be like.

What are some other improvements in technology that you can think of that can help keep you safe in the outdoors?



REQUIREMENT 2

Explore Global Positioning System (GPS) devices and how to use them.



The Global Positioning System, known as GPS, is a satellite-based radio navigation system owned and operated by the United States government.

If you want to find a location on a flat surface, all you need are two pieces of information: one to tell you the location based on vertical, and one giving the location based on horizontal. On a flat map, vertical is called longitude (lines that go north and south),

and horizontal is called latitude (lines that go east and west).

When you have the latitude and longitude, you can place a location on a map. Latitude and longitude are divided in degrees ($^{\circ}$), minutes ($'$) and seconds ($''$). There are 60 minutes in a degree and 60 seconds in a minute (similar to measuring time).

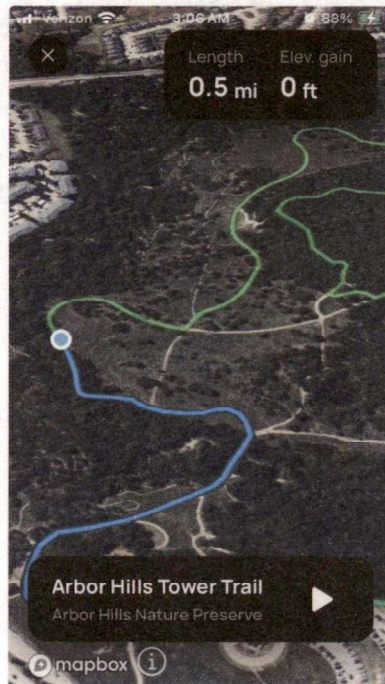
Each degree of latitude is about 69 miles apart. The most accurate location would be using degrees, minutes, and seconds. This gets the distance between coordinates to within 105.6 feet. GPS can pinpoint a location to within 16 feet. To be accurate, GPS uses a method called trilateration. Trilateration is determining a position by knowing your distance from at least three known points. When your GPS device receives a signal from at least three satellites, this gives the distance to each satellite and a very accurate location.

REQUIREMENT 3

With an adult, choose an online mapping program tool and plan a 2-mile trek.

GPS units can tell us where we are by using satellites. Satellites can also help us figure out where we want to go. Combining GPS and photos from satellites allows us to find the best path from one location to another. It can also give us images of what the path will look like.

With the help of your den leader or a parent, use an online mapping program to identify a path for your 2-mile trek. Use satellite images to identify potential obstacles and help determine distance. The mapping tool may even provide you with points of interest where you may want to stop.



REQUIREMENT 4

Take your 2-mile trek.



Your trek may be a walk, hike, or even on the water using paddle craft. It could be in the city, around a local camp, or on a lake. Follow the buddy system and bring along your Cub Scouts Six Essentials. Make sure to follow the BSA SAFE Checklist (page 55) when planning your trek.

