










By completing this patch, you'll be one step closer to being an Outstanding Observer!

LEARN

Remember a time when you made an observation or studied something carefully. Did you notice anything interesting? *Observation* is an important skill used by scientific thinkers. Practice your observation skills by completing the two activities below.

1. **Scientist Tool Kit:** Scientists use tools to make observations and collect information. What tools do scientists use? Choose three of the tools listed below. With the help of an adult, look up information about what they are, how they are used, and how they help scientists with their observations.

Magnifying Glass 	Thermometer 	Telescope 
Beaker 	Ruler 	Magnet 
Journal 	Scale 	Microscope 

Now that you have learned about some of the tools that help scientists in making observations, you are ready to make and record observations of your own.

2. **Science Sense!** Your five senses—seeing, hearing, touching, smelling, and tasting—are powerful tools that will help you learn more about the world around you. Spend some time outdoors. Using your senses and other tools such as rulers or magnifying glasses, make observations. In a journal, write or draw what you noticed. For a challenge, visit the same spot a few different times and record any changes or new observations.

EXPLORE

Now that you have sharpened your observation skills, let's get exploring! Choose one of the activities below and record your experience in a journal. Remember to use as many of your five senses as possible!

1. **Visit Brookhaven National Lab.** Visit the world-class facilities at Brookhaven National Lab for some free family fun at [Summer Sundays!](#) Brookhaven hosts a variety of exciting in-person and virtual school field trips, summer programs, and contests! [Visit the Office of Educational Programs website](#) to learn more.
2. **Field Trip Fun!** Long Island is filled with tons of great opportunities to explore! Visit a local science museum, aquarium, park or observatory. Record your experiences.
3. **The Excellence of Experiments!** Is a field trip not in your future? Try a science experiment or engineering challenge at home or with your troop! Check out these sites to get started:
 - Brookhaven Lab's [Science at Home](#) series
 - Energy Kids [Science Experiments](#)
 - Exploratorium Science Snacks: [Engineering & Technology](#)

SHARE

You have spent time learning, observing, and exploring. What did you find? Share your newfound knowledge and journal with your family or your troop.

About Brookhaven National Laboratory

We're a U.S. Department of Energy (DOE) Lab that delivers discovery science and transformative technology to power and secure the Nation's future. Primarily supported by the DOE Office of Science, Brookhaven Lab is a multidisciplinary laboratory with seven Nobel Prize-winning discoveries, 37 R&D 100 Awards, and more than 70 years of pioneering research.



Thirsty for more? Check out these links to learn about Brookhaven National Lab's history, awards, and more!

[This is Brookhaven Lab](#) video

Brookhaven research has been honored by [seven Nobel Prizes](#), National Medals of Science, Enrico Fermi Awards, Wolf Foundation Prizes, dozens of R&D 100 awards, and many other recognitions. Learn more about Brookhaven's awards.

Learn more about the Lab's past, present, and future by visiting our [75th Anniversary site](#).