



Main Event

Opening Ideas on Troop Program Resources

GROUP INSTRUCTION IDEAS

Transportation and Energy

- Define technology as inventions that aid daily life. Discuss how technology affects society and how society affects technology. Explain how new technology tends to replace old technology, and brainstorm where technology could go in the future.

Cyber Chip and GPS

- Review how the Scout Law relates to cybersafety and cyberbullying.
- Watch one or more videos from the [NetSmartz® Workshop website](#) about staying safe online.

Smartphones

- Discuss the evolution of long-distance communication, including smoke signals, semaphore, telegraph, telephone, cellphone, and smartphone.
- Discuss the safety risks of using smartphones (such as texting while driving or walking).


High-tech Camping

- Have someone who has been camping for decades discuss how camping technology has evolved since he or she started camping.
- If possible, share information from an early Boy Scout handbook, such as a reprint of the 1911 Handbook for Boys, to demonstrate the technology early Scouts used.


SKILLS INSTRUCTION IDEAS




Transportation and Energy


-  • Begin one of the following merit badges: Automotive Maintenance, Aviation, Canoeing, Cycling, Drafting, Electricity, Energy, Farm Mechanics, Motorboating, Nuclear Science, Railroading, Small-Boat Sailing, Space Exploration, or Truck Transportation.

Note: This is the list of merit badge options for the Boy Scout Nova technology module, [“Start Your Engines”](#).

-  • Design and build a working model vehicle (not from a kit). For guidance, see the Boy Scout Nova module, [“Start Your Engines”](#).

-  • List energy sources currently used in transportation technology.
- Discuss alternative sources of energy.
- Discuss the pros and cons of using alternative energy.

Cyber Chip and GPS

-  • With a GPS receiver for each participant, do the following:
 - Learn about global positioning satellites
 - Understand how latitude and longitude are represented in GPS devices

- Explore the basic functions of the GPS receiver
- Compare GPS usage to the usage of map and compass

Note: Ideally, all GPS receivers should be the same model. If a variety of receivers is used, the instructor needs to be familiar with each model.



- Review the above information.
- Learn how to program a route using multiple waypoints into a GPS receiver.



- Review the above information.
- Learn the science behind personal locator beacons. Discuss the difference between latitude and longitude and the Universal Transverse Mercator (UTM) coordinate system. Discuss when each system is preferable.
- Convert latitude and longitude coordinates into UTM coordinates.

Smartphones



- Explore the evolution of the telephone.
- If possible, show examples or pictures of the following devices: hand-crank telephone (using a switchboard), dial telephone, push-button phone, cordless phone, original cellphone (“brick phone”), flip phone, and smartphone.



- Using a smartphone, demonstrate the basic functions of:
 - making a phone call
 - setting a calendar date
 - sending a text
 - finding an address
 - checking the weather
 - Share your favorite apps within the group.
- Note: Depending on the experience of the group, you may want to cover more advanced functions.



- Learn what it takes to develop an app, including how apps are coded and uploaded to an app store.
- Brainstorm ideas of an app that would be useful to your group.

High-tech Camping



- Use outdoor magazines, catalogs, and websites to research the technologies used in the Scout Basic Essentials and other basic camping gear.
- Discuss when it’s appropriate to pay more for higher tech gear.



- Learn about the technology involved in camp stoves and camp lanterns.
- Discuss the safety features required for gear that uses flammable materials.
- Discuss when it’s appropriate to pay more for higher tech gear.



- Use outdoor magazines, catalogs, and websites to find the ultimate high-tech camping gear, such as extremely light sleeping bags or camp stoves with USB ports.
- See who can come up with the most amazing (or ridiculous) application of technology for camping.

- Discuss when it's appropriate to pay more for higher tech gear.

BREAKOUT GROUP IDEAS

Getting Ready for the Main Event

- Menu Planning (if applicable)
- Duty Roster Planning (if applicable)
- Patrols discuss what special items they will need for the main event.

Preparation for the meeting's game or challenge

GAME AND CHALLENGE IDEAS

[Library of Games and Challenges on Troop Program Resources](#)

- [Nitro Transport](#)
- **Photo Scavenger Hunt**
 - *Materials:* For each team, a smartphone and a computer with Internet access
 - *Method:* Teams go around the meeting place and photograph an assigned list of items (e.g., tree), actions (e.g., high five), and/or concepts (e.g., happy). They then upload their photos to an assigned multimedia website like Flickr, Instagram, or Facebook.
 - *Scoring:* The first team to upload its photos wins.
 - *Variation:* Assign more subjects than teams have time to photograph. They will then have to manage their time in order to shoot and upload as many photos as possible. The most photos uploaded wins.
- **Find What They Hid**
 - *Materials:* For each team, a GPS receiver and an object to hide
 - *Method:* Teams hide objects, noting the GPS coordinates. They then give those coordinates to other teams to find the hidden object.
 - *Scoring:* Award points to teams that find objects, as well as to those who have their objects found.

Note: To increase the challenge, don't identify the objects. Instead, give GPS coordinates and clues or riddles that hint at what the objects are.
- **Tech Timeline**
 - *Materials:* For each patrol, a set of 15 to 20 cards showing milestones in the history of technology (e.g., the first telephone call, the introduction of the Model T, the first personal computer)
 - *Method:* Before the game, tape or pin each team's cards in random order on one wall of the room. Teams line up relay style at the other end of the room. On signal, the first player on each team runs forward and relocates two cards to be in the correct order. He or she then runs back to tag the next player, who can also relocate two cards. Continue playing until one team declares it has put its cards in the right order. If they're correct, they win.
 - *Scoring:* First team to put its cards in correct order wins.

Note: An Internet search for "technology timeline" will turn up plenty of milestones to put on the cards.

CLOSING IDEAS

- [Leader's Minutes](#)
- [Ceremony](#)

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TROOP LEADER RESOURCE LINKS

[Advancement Resources](#)

[Awards Central](#)

[Boy Scouts](#)

[Guide to Safe Scouting](#)

[SCOUTBOOK](#)

[Scouting Forms from the National Council](#)

[ScoutCast](#)

[Scouting Magazine](#)

[ScoutStuff.org \(Retail Site\)](#)

[ScoutingWire](#)

[Sign in to MyScouting.org](#)

[Take Youth Protection Training](#)

[The Outdoor Adventure Planning Guide](#)

[Troop Leader Guidebook Appendix](#)

[Uniforms](#)