SCOUT WIRED

A HOW-TO GUIDE TO RUN A SUCCESSFUL

JOTA JOTI

WWW.SCOUTWIRED.ORG

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SCOUTS
South Africa

JOTA-JOTI

JOTA-JOTI (Jamboree On The Air - Jamboree On The Internet) is an official international event of the *World Organization of the Scout Movement (WOSM)*. Running since 1958 and 1996 respectfully, JOTA-JOTI allows Scouts around the world to connect and share their Scouting experience and make friends.

Intended as a youth-led event, JOTA-JOTI promotes better communication and global citizenship by enabling and encouraging Scouts around the world to communicate with one another by means of amateur radio and the internet, providing a fun and educational Scouting experience and promoting their sense of belonging to a worldwide Scout Movement.

JOTA-JOTI related activities take place simultaneously all around the world each year during the third weekend in October. The programme for JOTA-JOTI consists of activities developed at world level and initiatives developed at national and local level, supported by National JOTA-JOTI Coordinators and their respective teams.

Basic Principles

- JOTA-JOTI is a fun and exciting experience for young people in Scouts and Guides.

- JOTA-JOTI seeks to promote quality Scouting and Guiding in a manner faithful to the purpose, principles and method that is consistent with the needs and aspirations of young people in today's world.

- JOTA-JOTI strives for the meaningful engagement of as many young people from as many parts of the world as possible.

- JOTA-JOTI is an occasion to celebrate Scouting and to generate positive energy to support the development of WOSM and WAGGGS.

Educational Objectives

- Promote a sense of belonging to the worldwide Scout and Guide Movements.

- Promote peace, cultural awareness, tolerance, sharing, collaboration and to encourage good deeds and active citizenship.

- Provide opportunities for the development of teamwork and leadership skills through patrol-based activities.

- Provide exciting opportunities for young people to explore technology and to develop technical skills.

- Promote innovation, creativity, and communication.

- Offer programme appropriate to young people in Scouts and Guides of all ages.

Connecting from home & JOTA-JOTI Safety

- Don't share personal information such as your home address, your full name, passwords, phone number, school, or email address (use a Scout group email if needed). Similarly, don't share photos or videos of other people, or anything that is revealing or inappropriate.

- Don't organise to meet people you have met online outside of Scouting events.

- Don't click or accept messages, emails, files, or links from unknown sources as these can have detrimental effects on your systems and security.

- Be aware that not everything on the internet is true and keep an eye out for misinformation and bad actors.

- Remember that it is a good idea to take regular screen breaks, as well as move and stretch regularly.

- If connecting from home, ensure that there is nothing in your background that can identify you personally, e.g., family photos, awards, mail etc.

Connecting from home

Participants under 18 and connecting from home must inform and involve a parent or guardian in their JOTA-JOTI experience to supervise online activities for the duration of the event and ensure their safety.

For those connecting from home, remember you have a right to feel safe and secure whenever you are taking part in activities or interacting with any member of Scouting or Guiding. If you feel unsafe, or see unsafe behaviour, speak to a responsible adult in your household. If something occurs while using our services, that makes you feel unsafe or you feel is inappropriate, mention it to a ScoutWired team member via a ticket on Discord or on our support website (https://support.scoutwired.org/).

Connecting from JOTA-JOTI Bases

Children under 13 will require direct adult supervision at bases during online and on-air activities.

If doing video calls with other bases around the world, obtain permission from parents in advance to avoid complications and protect yourself and the group.

For leaders running a base, it is a good idea to encourage youth to come and talk to you if they feel unsafe, threatened, uncomfortable or concerned during JOTA-JOTI. In these cases, please refer the matter to the service provider that it occurred on. If you see something on our services, please open a ticket on either Discord or on our support website. (https://support.scoutwired.org/).

Setting up a JOTA-JOTI base

JOTA-JOTI is an awesome event, but it can be complicated and challenging to run for both new and experienced leaders. We hope this guide helps you on your way to organise and run a successful, *SAFE* base, that works for your youth. Remember that every base is different as every group has different interest and needs.

While JOTA-JOTI is mainly radio and internet based, it doesn't preclude practical activities. For example, we have certainly seen many groups pair it with camping, hiking or any number of other outdoor activities. However, regardless of how you run it JOTA-JOTI bases still need the basics like most events. While this list may seem obvious, a good base will likely need to include:

- An area to sleep, take breaks or tune-out from the buzz of JOTA-JOTI

- Space and power to setup both the radio equipment and computers that is under cover, allows cables for radio antenna to run outside, without creating tripping hazards.

- Space away from equipment to stretch, move about, and play physical activities.

- Water, food, drinks, accompanied by reminders to eat and drink along with occasional screen breaks.

- Toilet locations are easily identifiable and known, particularly for younger kids.

- Lastly, we recommend that a base have some offline activities for when the airwaves are empty, or youth need to take a screen break (See our attached list for ideas).

Additional things to remember:

- One of the largest challenges, particularly with younger Scouts and Guides, is preventing them from taking food, drink, or arts and craft supplies to the area you are running computers or radio equipment in. If possible, we suggest separating such things from this equipment to keep your radio operator and other electronic equipment free of food, liquids, and glitter (seriously it gets everywhere!)

- For bases that run overnight (quite common) we strongly suggest strong coffee or swapping leaders out if possible.

- Your Scouts/Guides may suggest running a local server of a computer game at your JOTA-JOTI base or bringing a console such as an Xbox, PlayStation or Wii to play multiplayer games as a group (for example Mario Cart, Mario Party, Dirt4 Racing, Kerbal Space Program etc.). Our advice is to monitor the rating of such games and assist where you can. In some cases, they may wish to host a game that already has a Scout/Guide run server, in these cases mention to them that it exists, but don't discourage them from hosting it as a local game as these can ease the strain on internet connection. This is also a good way for youth to develop IT skills for the future and can make them feel more involved.

- Lastly, we strongly suggest a world map for youth that keeps track of locations they have spoken to (or a prompt sheet for younger Scouts and Guides). A whiteboard of general info, activities, safety, and online rules for the base can also be a great aid to help make thing run smoothly.
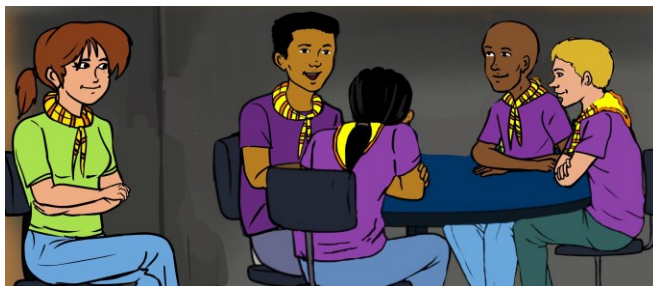
Setting up JOTI

Setting up JOTI requires a little bit of work, but at its core requires three main things: An undercover area with power; devices that can connect to the internet, play games, and talk online; and a reliable internet connection. Here are some helpful tips:

- Firstly, you will want to ensure that you set up tables so that youth aren't crowding each other and that cables can be run safely to avoid becoming trip hazards. We recommend, if possible, to run your electronics tables parallel (see page 3) so that cables are safely tucked away, and walking space behind the computers is maintained to allow people to move around. Preferably, we suggest running cables overhead, out of this space, or under mats.

- You will need multiple power cables and power boards (see below). It is also a good idea to have charging stations available for phones and radios.

- While this may change by country, generally, each power port can typically only take 3 desktop or gaming laptops and screens, 4-5 mini desktops, or 4-6 laptops. It is a good idea to organise access to the power breaker in case someone overloads a circuit.

- To support moderation, it is recommended to have a central computer for leaders. This, and any computers running LAN games, are best run from another circuit if possible, to avoid crashing if you overload the main room.

- Each computer will need a mouse and earphones or headset for youth who are going to be participating in voice chats.

- If youth are bringing their own device, we recommend providing a secure space to store these devices when not in use. This prevents loss or damage to personal belongings and maintains a safe and organised environment.

- Minecraft requires Java edition to play with others worldwide.

- Lastly, it is a good idea to set aside a space for your youth to video talk with other Scouts or Guides around the world. Some groups use projectors or have a dedicated easily visible computer setup. It is important that it is easily visible by leaders present as video chats on platforms, other than ScoutWired, may not have a moderator.

By implementing these safety measures and organising the base thoughtfully, youth can enjoy a successful and secure JOTI, fostering connections, learning, and camaraderie in a safe digital environment.

You can find the core events run through JOTA-JOTI when released at:
https://www.jotajoti.info/programme

The list and schedule of ScoutWired events will be released on our website:
https://scoutwired.org/JOTI/#page-content

Setting up JOTA

JOTA (Jamboree On The Air) is an integral part of many JOTA-JOTI bases. As ScoutWired is based online, we primarily focus on the online activities, however, we do strongly suggest incorporating JOTA activities in your base.

For a base to run JOTA, it requires someone with a radio operators' licence to assist your group in the setup and communication with other groups. We recommend trying to organise with a radio operator or radio group well in advance of JOTA-JOTI.

Setup of JOTA bases:

- Your radio operator will need space and adequate power (they can require a lot of power). It's a good idea to ask in advance if they require space inside or want to run from a car or tent as most radio operators will have a preference.

- Ideally, their equipment and setup will need to be isolated from most other noises as their radio transmitters can be sensitive to background noise.

- They may require easy outside access to run cables or their gear from their car.

- They will require at least a $5m^2$ clear distance from their antennae avoiding power lines and trees.

- They will want to be seated beside youth during operation as they are responsible for the use of their radio code on the airwaves and regulation of its use.

- You should explain in advance the Scouts/Guide 'two deep' policy to your radio operator along with any ceremonies that they might be asked to join in.

- Radio operators are required to do several things by the radio code, such as announce their call sign every 10 minutes. These actions may change depending on their licence, the frequency, and equipment - please be accommodating if they are doing something that at first glance may seem annoying or inconvenient.

- Remember that their radio equipment is expensive - try to keep it safe from damage.

We recommend that you:

- Offer operators assistance to setup,

- Ensure that youth listen when they speak,

- Explain your country's child protection policy to them before the event,

- Provide food and water for your operator. This will maintain ongoing goodwill for future JOTA bases.

For more information and ideas visit https://www.jotajoti.info/jota/radio-handbook
For a List of South African Radio Clubs visit https://www.sarl.org.za

Joining and Using Discord

ScoutWired uses Discord as a communications platform because of the level of safety and security available for users. Once you have installed Discord on your computer, phone or device, join the ScoutWired discord server via discord.scoutwired.org

You need to use a Verified Account to access our server. For bases, this can be problematic as you can't log in to the same account on multiple computers making a separate account for each computer necessary.

To resolve this, create multiple Gmail addresses for your base that are the same but with a slight variation. This could be done by adding numbers/word after the first part of the address and before the @gmail.com for example *test+1@gmail.com; test+2@gmail.com* etc.

Upon joining the server, all accounts have a ten-minute wait period before being able to interact and must agree to the server code of conduct to do so.

For more information in setting up Discord accounts, including ScoutWired's suggested security settings, visit https://scoutwired.org/discord/securing-discord/#page-content

Text Channels

ScoutWired have multiple channels year-round, but over JOTI there will be dedicated JOTI text channels, including a dedicated channel for JID codes and radio operators. All our channels are moderated by our team, and private messaging is not allowed. If there is a problem on the server that needs our attention, open a ticket on Discord by going to the '*#quick-support-channel*', click the little envelope, and a trained team member will respond to the issue promptly.

However, some channels will require you to opt into them. You do this by going to '*#opt-in-channels*' and click the symbols under the channels you want to join.

Similarly, you can change which channel you are viewing by clicking on another channel name that starts with a #

Voice Chats

Over the JOTA-JOTI weekend, we have voice chat(s) open for the entire duration allowing everyone from all over the world to connect with others. ScoutWired requires non-team members to enable push-to-talk to communicate. This gives everyone a chance to speak and minimises background noise. Our voice chats are always moderated by at least two trained team members to ensure user safety.

Instructions on how to set up push-to-talk can be found at: https://scoutwired.org/discord/voice-chats/#page-content

Video Chats

Over the JOTA-JOTI weekend, there will be a chance for some video chats. In order to take part in these, you will need to have a webcam, along with push-to-talk set up as above. Video chats will also have at least two trained team members moderating to ensure the safety of our users.

Tips and Tricks

JOTA-JOTI bases are complex. Below are a few helpful tips our team has learnt from running their own bases over the years.

General

- Setup as much in advance of youth arriving where possible (this particularly applies to computers, UHF's, radio equipment, tables and power cables)

- It is important to have activities that aren't internet or radio reliant. There may be quiet periods, the youth may not be interested or become bored, and it provides screen breaks

- If possible, have someone tech savvy on hand (this can be a youth member!)

- Have an activity checklist to complete e.g. *do these things to get the badge* (basically prevents them sitting at any one activity the whole time)

- Have a question prompt sheet for youth members to support discussions with other Scouts around the world

- Be aware that Google Translate can assist with language barriers, however, be cautious as it isn't always correct

- You can include other things such as a wide game, hike, or other activities as pre or post JOTA-JOTI events

- HAVE FUN!!! When you are having fun, your youth are having fun!

JOTI – Internet

- Try to set aside a space to video chat with other groups.

- If you have a projector, a movie is a good backup plan while things are quiet.

- Double check your passwords, accounts, and cables in advance

- Minecraft requires Java edition and passwords will be required for use. Consider how you might manage this. Will youth share a computer that only has one sign in, or are they required to have their own sign-in?

- Check that you have a strong enough internet connection for your base and the activities you propose to run

- If you are going to be using video, wear your uniform. It allows for instant recognition of Scouting members and provides an opportunity to ask uniform related questions.

JOTA – Radio

- Reach out early to an amateur radio group to assist with running JOTA.

- Understand that your radio operator has a lot of radio rules to follow.

- Where possible, organise times for radio chats with other groups in advance.

SCOUT WIRED

ScoutWired has been around since 2015, a youth-led adult-supported organisation, and is one of the providers for JOTI, providing online chat and gaming services. All of our services and events are moderated by our amazing team. We aim to provide as much support as we can for groups as well as individuals involved in Scouting and Guiding, to get online and connected with each other.

OUR SERVICES

GAMING:

Minecraft JAVA:
IP: minecraft.scoutwired.org

Terraria:
IP: terraria.scoutwired.org
Password: SWTerraria

Factorio:
Password: SWFactory

For full instructions on how to join our servers visit *www.scoutwired.org*

CHAT:

Our Discord Server:
discord.scoutwired.org

We will have voice and text channels open all weekend, all of which are moderated by our team.

Scheduled video calls are being finalised.

UPCOMING JOTI EVENTS

SCHEDULED:

Minecraft (Build Battles, Minigames)
Terraria (Boss Battles)
Factorio Livestream
Kahoot
Geo-Guesser
Escape Room (Voice Channel)
Among Us
Fall Guys
Discord Activities

PASSIVE:

Battleship, Connect 4
UNO, Minesweeper
Counting Channel
Guess the Thing (Emoji Sayings)
Draw it Challenge
Online Scavenger Hunt
Discord Adventure Bot
Minecraft Adventure Map

...with more to be determined!

JOTA-JOTI Radio

The official radio station for JOTA-JOTI, powered by Avon Scout Radio has live shows, music, competitions, news and entertainment.
https://jotiradio.org/

JOTA-JOTI Campsite

Normally WOSM runs activities, they can be found at https://www.jotajoti.info/programme

JamPuz JID codes

Every year many bases use JamPuz ID's when talking to other groups around the world. These identify your Region, Country and ID without identifying your actual location. There is also 'Bingo', 'Suffix Search' and 'Find-a-Word' available for these ID's. Info on this is available
at https://www.world-jotajoti.info/jampuz-documents/

Personally, we have found that these can obstruct youth talking to others in favour of attempting to rush these activities, and many of our members prefer to use a map with pins instead as it facilitates better communication. Importantly, some bases and people you chat with may have decided to avoid using JamPuz JID codes.

Additional Resources

Radio Based Games
https://www.jotajoti.info/radio-communication-games

Making A Radio
https://scoutlife.org/hobbies-projects/projects/40/catch-some-radio-waves/

Joti Radio
https://jotiradio.org/

Activity	Resource	Section
Morse Code Name Key-Chains 1. Tie the string to the ring. 2. Begin threading your beads using the Morse Code chart. *Make sure you put a clear spacer bead between each letter* 3. When done, tie a knot in the end to keep the beads on. *Hint – wrap a tiny piece of tape tightly around the end if the string to prevent fraying*	• String • Keychain rings • Coloured Round & long Beads • Clear beads • Morse code charts	Meerkats to Scouts
Draw it Challenge Design a JOTA/JOTI badge or emoji to be entered into the ScoutWired competition	• Paper • Pens, pencils and markers	Meerkats to Scouts
Where in the World Put a pin in the world map based on the location of the person you have talked with	• Corkboard • Pins • A large Printed Map	All
Semaphore Flags Youth members use red and yellow flags to send messages to each other over a distance, this activity requires two sites within visual range of each other **See Page 18 for Printout**	• Sets of semaphore flags (*can be handmade)* • Semaphore Printout	All
Sign Language Learn to sign a set of common phrases in your country's sign language or learn to sign something important to Scouting, e.g., promise or law. For example, the Australian Scout promise in ASL here, https://www.youtube.com/watch?v=G27e5yG-sng	• A person who know sign language --or-- • Internet and a device to play video on	All

Emergency Dispatch This activity must have two sites which can't be seen by each other. A crash site is randomly placed on the 'dispatchers' map. The dispatcher has a UHF and acts as the ambulance which is placed on the map at random. The drivers get traffic and roadblocks added to their map and a random start location. The dispatchers first task is to find where the ambulance is then they need to direct the drivers to the scene of the accident	• UHF radios • 2 maps • Crash vehicles (Aka toy cars) • "roadblocks"	Cubs & Scouts

Extra JOTA-JOTI Activities

Activity	Resource	Section
String Phones • Cut a small slit on the bottom of each paper cup. • Tie a knot with the string at one end of the paper clip. • Repeat #2 with the other end of the string. • Stick the paper clips in the small holes at the bottom of the paper cups. Grab the other ends of the paper clips and pull the paper • clips and string through. Have your kids take each paper cup and walk away • from each other until the string the taut. • Have one youth put the paper cup to his/her ear while the other softly speaks into his/her paper cup	• String or yarn • 2 paper clips • 2 disposable cups (Paper or Plastic) Makes one set of string phones for 2 people to use	Meerkats & Cubs
Metal Detector Tarp Use a metal detector to find where metal is hidden under tarp with a grid on it. Fill in a worksheet showing where the metal is	• Tarp • Metal Detector • Scrap metal • Paper	Meerkats to Scouts
Battleship Either the board game or as an activity, where you hang a tarp and draw a similar grid on either side (spaces large enough for chairs). Players take a chair and sit in it on a grid spot. Each side takes turns calling out a Grid coordinate – if the other side has a player sitting there, that player "sinks" (normally with great acting). Last team with player's wins	• Tarp • Chairs OR • The Board Game	Meerkats to Scouts
Break the Code Decipher a code. Put your entry in the tub to win a prize **See Pages 19-24 for examples of ciphers and codes**		Meerkats & Cubs
Keyboard Jigsaw Place all the loose keyboard keys back as quickly as possible	• Any Broken Keyboard	Meerkatss & Cubs

Code Wheel

Each person gets a worksheet - Cut out the circles on the

sheet (Explain how the code works as they do this)
- Use a split pin to pierce the 2 circles in the middle (as close as possible!!) and pin together
- Get them to work out the code [Answer = Meerkats Scouts] - Use other codes and worksheets if there is time

- Split pins   Meerkats &
- Code Wheels   Cubs

- Scissors

Extra JOTA-JOTI Activities

Activity	Resource	Section
Geographically Misplaced A pair of patrols are separated, with each given a map (without Lat/Long ideally), and a UHF radio. One team is given a location on a map and is required to communicate it to the other one only using features on the map. *You can also* *do this with multiple patrols if you have the UHF's for it and make it a race to figure out where the location is.* *A variation of this is to give a team a point to navigate the other team to, and they can move a marker or figure on the map until they reach this point*	• A set of UHF's • Mud Map • Marker or a Toy Car/ figure	Any
Radio Whispers This game is Chinese Whispers using UHF - give each pair of scouts a pair of channels they can communicate on (they can't say these to others). Ask them to get a message of your choice to a set person in the group	• A set of UHF radios	Meerkats, Cubs & Scouts
GeoGuesser* https://www.geoguessr.com/ *Note you need an account and only get so many free games	• Internet • Device	Any
Explore international cuisine / foods https://www.easy-kids-recipes.com/international-recipes.html	• Internet • Device	Any
Match the Badge/Uniform Print several badges/uniforms and flags from around the world. The aim is to match the international scout/guide badge to the country.	• Internet • Device	Any
Say "Hello" in multiple languages https://www.bigheartworld.org/activity/hello-around-the-world/ You could also print this out	• Internet • Device	Any

Extra JOTA-JOTI Activities

Activity	Resource	Section
Learn scout songs from around the world* https://www.mamalisa.com/?song_type=Scout+Song&t=e_ty pe&id=553 *which section is dependent on the group and song in question	• Internet • Device	Any
Computer Deconstruction Remove the battery from any broken computer, and let the kids take it apart. If you can, talk through the components and how they work. If not, ask if anyone can (you might be surprised)	• Any broken computer • Screwdriver • Box for screws	Meerkats & Cubs
Scout Scarf Scouts all learn about their group scarf and then share this with others online and via radios - a great conversation starter!	• Scarf	Any
Build a Radio Tower Build a tower to hold an antenna or person who is going to send some sort of signal, Youth members may be asked to design the structure with aid from the radio operator if you have one	• Staves • Rope • Radio gear	Scouts Rovers
Charades One person tries to act out a word without speaking. You can either pre-generate a set of words and cards, or use a website like https://randomwordgenerator.com/charades.php	• Imagination	Any
Phonetic Alphabet Sometimes when speaking on the radio, it is difficult to understand the other person. There may be interference or the other person's accent may be strong. In these instances, it helps to spell important words. The trouble is that many letters sound the same – Like 'C; 'B' 'D' and 'V'. To make things clearer, we use whole words to stand for each letter - this is called the Phonetic Alphabet. Get youth members to spell their name or recite a sentence using Phonetic alphabet	• Printout	Any

See Pages 25 & 26 for Phonetic Alphabet Print-outs

Morse Code with Light Use Morse code to send signals with light to each other over a distance. This activity requires two sites within visual range of each other **See Pages 23 & 24 for Morse Code Print-outs**	• Torches • Morse Code Sheet	Cubs, Scouts
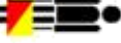
Extra JOTA-JOTI Activities

Activity	Resource	Section
Geocaching Either use set co-ordinates for existing caches or hidden objects, or set a course yourself. Normally you use a GPS, but you could also use a compass and map. https://www.geocaching.com/play	• Geocaching App	Any
Minefield Using handheld radios, a blindfolded group is guided around an obstacle course by a sighted person that must stay outside the course and not touch the blindfolded group	• Radio gear	Any
FM Fox hunt / RDF Hide an FM fox transmitter (Kit from electronics shop) and have the kids find it using an FM radio receiver. The signal and sound will get stronger as they get closer. The fox can be stationary or moving but it is recommended that the fox be moved each session to prevent the youth from giving the location away to others	• Fox receiver • Fox Transmitter	Cub to Rover
Lego puzzle The game is played with 2 patrols or individuals. Each team is given an identical set of Lego and a radio. One team builds (the builder) and another copies the model (the copier). The builder makes a small object from the Lego blocks and the copier tries to recreate it. This may sound very easy, but they can't see each other! Using the walkie talkie, the builder gives instructions to the copier telling him where the next Lego brick should go. Do they both look the same when finished? When they have finished, swap roles so both experience the difficulties of the other role	• Lego • Handheld Radio	Any
Lego Flags Challenge youth to make flags from around the world with Lego bricks. You will need to consider what colour bricks are needed, you will likely need both basic bricks and plates in most colours, but especially blue, red, white, and green. Instructions to make Lego flags: https://frugalfun4boys.com/lego-world-flags/	• Printout of world flags • Lego	Any

Extra JOTA-JOTI Activities

Activity	Resource	Section
The Three Monkeys Teams of three race to complete tasks, but there is a twist • One person can see but cannot speak • One person can see the first person and talk but can't hear • One person can hear but is blindfolded Have a range of activities to be completed, e.g. putting up a tent, tying a new knot, making pancakes, building a tower etc.	• Blind folds • Earmuffs	Scouts to Rovers
Radio Pacman This game is another where pairs give each other instructions using a walkie talkie. It resembles the old computer game Pacman. *SET UP:* Set up a maze-like field using coloured tape which resembles a simple Pacman maze. In Pacman there are also dots. In the game these are represented by water balloons. The idea is that 2 or 3 teams play against each other. One member of each team is blindfolded and is given a bucket and a walkie talkie with headphone or earpiece. Each team should be guided through the maze and 'eat' as many dots as possible (put the balloons in the bucket) They may not cross the lines. Just like a real Pacman but without the monster to eat you up	• Blind folds • Bucket • Water balloons • Tape • Tent pegs • Handheld Radios for each team with an earpieces	Cubs to Rovers

A - 1	B - 2	C - 3	D - 4	E - 5	F - 6	G - 7
H - 8	I - 9	J – Letters to Follow	K - 0	L	M	N
O	P	Q	R	S	T	U
V	W	X	Y	Z		
End of Word - Space	Numerals to follow	Cancel	Error / Warning			

Caesar Shift Cipher

The Caesar Shift cipher is one of the oldest but simplest ciphers out there. It substitutes one letter for another in the alphabet, corresponding to a specific shift up or down the alphabet.

Assembling your cipher wheel

1. Print out the wheels found on Page 20 and cut them out.
2. Use something (e.g. a pencil/pen) to poke the holes in the middle of both wheels.
3. Place the smaller wheel on top of the larger wheel and use a split pin to connect the two together. Make sure the wheels can rotate freely!

Encrypting a message using the cipher wheel

1. Write out your message normally.
2. Pick a number between 1 to 26. This corresponds to the 'new' letter of the alphabet. For example, 1=A, 2=B, 3=C, and so on.
3. Turn the small wheel until the 'A' on the larger wheel is aligned with the chosen number (e.g. if you picked 25, the 'A' should be aligned with 'Y').
4. Encode your message by writing it out with the newly aligned letters from the larger wheel. For example, HELLO written with 25 is FCNNM.

Deciphering a message using the cipher wheel

1. Deciphering starts in the reverse of the encrypting process. You will need to know what encoding number was used so you can properly align your cipher wheel. Otherwise, it will take a lot of trial and error!
2. Turn the small wheel so that the encoding number is aligned to the correct letter. A paperclip may be handy to help make sure the wheels don't move whilst decoding your message.
3. To decode the message, find the letters from the encrypted message on the larger wheel and write down the aligned letter from the smaller wheel. So, the word TQXXA encrypted with the number 13 would be decrypted to say HELLO.

For Bonus Points try to decode the following ciphers

1. CTKTG VDCCP VXKT NDJ JE, CTKTG VDCCP ATI NDJ SDLC...

2. H IHSHUJLK PLA TLHUZ H JBWJHRL PU LHJO OHUK

3. DWSNW LZAK OGJDV S DALLDW TWLLWJ LZSF QGM XGMFV AL

4. MAX SHFUBX BL UXABGW RHN

5. UFYR FYQ DMSP JCRRCPQ, QMKCRGKCQ LGLC
    JCRRCPQ, ZSR LCTCP DGTC?
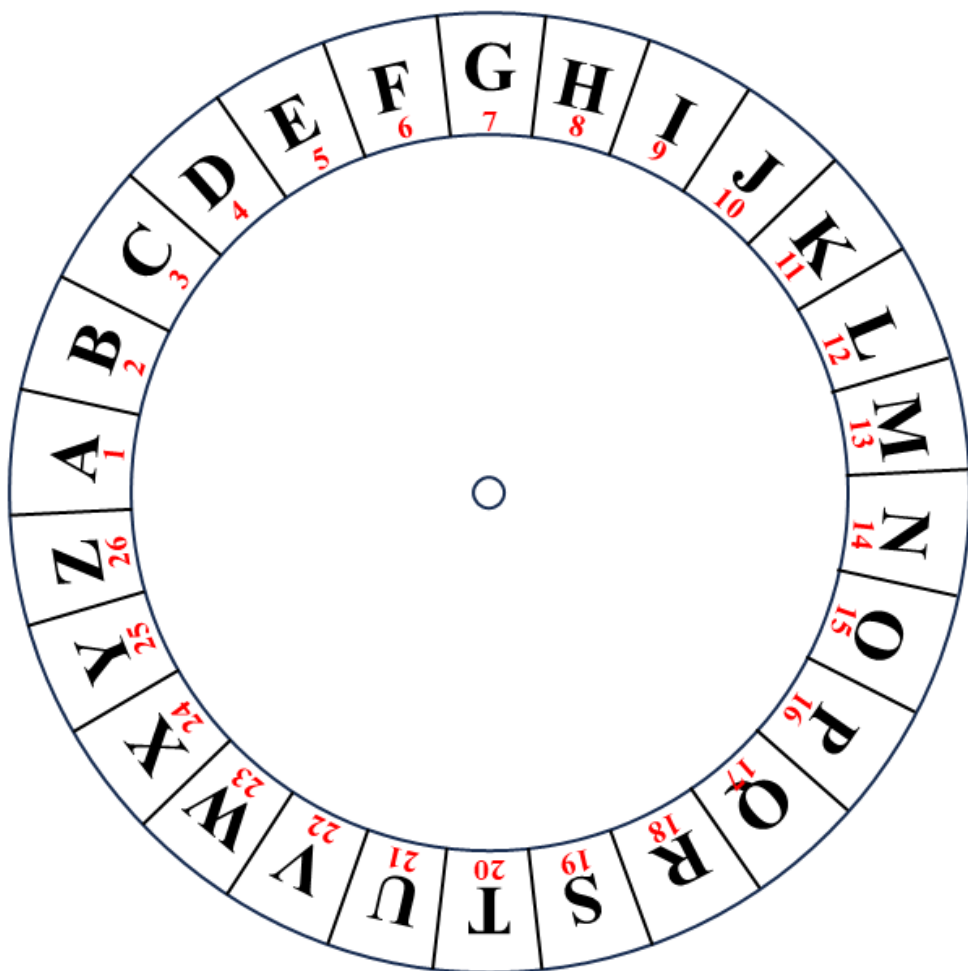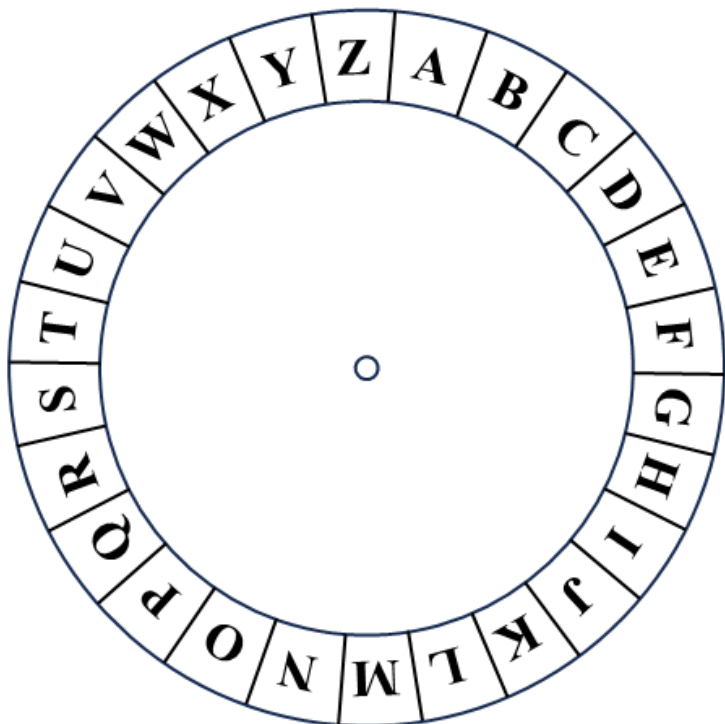
AtBash Cipher

The AtBash cipher encrypts messages by substituting letters with the reverse alphabet.
See below for the full code:

A = Z	B = Y	C = X	D = W	E = V	F = U	G = T
H = S	I = R	J = Q	K = P	L = O	M = N	N = M
O = L	P = K	Q = J	R = I	S = H	T = G	U = F
	V = E	W = D	X = C	Y = B	Z = A	

Encrypting a message using Atbash

1. Write out your message normally.
2. For each letter, swap it to the inverse letter using the table above and write down your, now encrypted, message.

Deciphering a message using Atbash

1. Use the table above to find the inverse letter in your encrypted message.
2. Write it out to decode the text.

Atbash Ciphers to Decode and Answer

1. DSZG XZM UROO Z ILLN YFG WLVHM'G GZPV FK HKZXV?

2. DSZG PRMW LU YZMW MVEVI KOZBH NFHRX?

3. DSZG WL BLF XZOO Z YVZI DRGS ML GVVGS?

4. GSV NLIV BLF GZPV, GSV NLIV BLF OVZEV YVSRMW. DSZG ZN R?

5. DSZG WL BLF XZOO Z KRT GSZG WLVH PZIZGV?

A= Z
B = Y
C = X
D = W
E = V
F = U
G = T
H= S
I= R
J = Q
K= P
L= O
M= N
N = M
O = L
P = K
Q = J
R = I
S = H
T = G
U= F
V= E
W= D
X= C
Y= B
Z= A

Pigpen Cipher

The Pigpen cipher converts the letters in the encoding message into symbols consisting of a grid with or without dots.

A	B	C
D	E	F
G	H	I

J	K	L
M	N	O
P	Q	R

S / T / U / V (in X-grid)

W / X / Y / Z (in dotted X-grid)
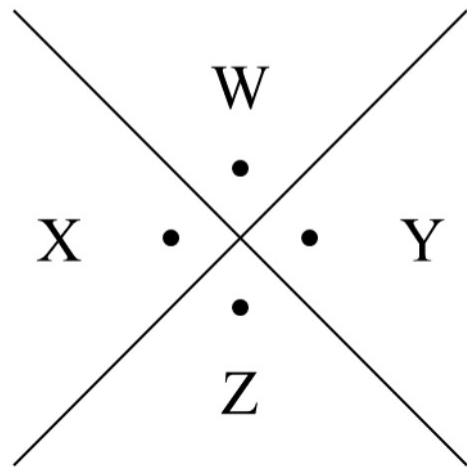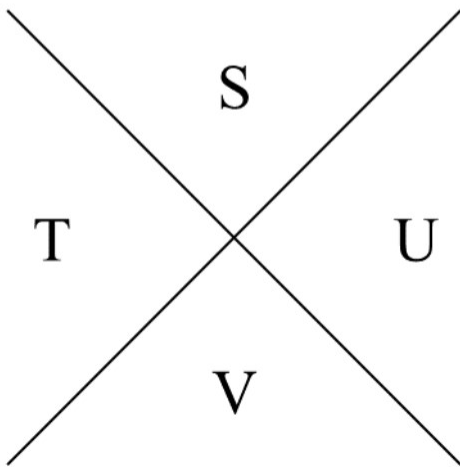
Examples:

$$A = \rfloor \qquad T = > \qquad N = \boxed{\cdot} \qquad Z = \mathord{\wedge}$$

Try to encode your name, your group and favourite colour!

Try to decode:

⌞⌐⊐<⊔<Γ∨ ⌐⊏□ ⌐∨□∨⊏⊐□

∨⊐⊏⌐∨ ⌐⊏□ ⊏∧⊐⊏⊏⌐>⊐⊐

⊏⊏⊔⊐⊏> ⊔⌐⊐□□ Γ⊏∨⊐⌞

International Morse Code

1. The length of a dot is one unit.
2. A dash is three units.
3. The space between parts of the same letter is one unit.
4. The space between letters is three units.
5. The space between words is seven units.

A ● ▬	U ● ● ▬
B ▬ ● ● ●	V ● ● ● ▬
C ▬ ● ▬ ●	W ● ▬ ▬
D ▬ ● ●	X ▬ ● ● ▬
E ●	Y ▬ ● ▬ ▬
F ● ● ▬ ●	Z ▬ ▬ ● ●
G ▬ ▬ ●	
H ● ● ● ●	
I ● ●	
J ● ▬ ▬ ▬	
K ▬ ● ▬	1 ● ▬ ▬ ▬ ▬
L ● ▬ ● ●	2 ● ● ▬ ▬ ▬
M ▬ ▬	3 ● ● ● ▬ ▬
N ▬ ●	4 ● ● ● ● ▬
O ▬ ▬ ▬	5 ● ● ● ● ●
P ● ▬ ▬ ●	6 ▬ ● ● ● ●
Q ▬ ▬ ● ▬	7 ▬ ▬ ● ● ●
R ● ▬ ●	8 ▬ ▬ ▬ ● ●
S ● ● ●	9 ▬ ▬ ▬ ▬ ●
T ▬	0 ▬ ▬ ▬ ▬ ▬

Morse Code Decoder Diagram

DOT ·

DASH —

START

E · · · · I · · · · S · · · · H
· · · · · · · · · · · · · V
· · · · · · · · · · · · · · 4 5
· · · · · · · · · · · · · 3
· · · · U
· · · · · · · · F
· · · · · · · · · · 2

A · · · · R · · · · L
· · · · W · · · · · J · · · · P
· · · · · · · · · · · · · · 1

T · · · · N · · · · D · · · · B · · · · 6
· · · · · · · · · · · · · · · X
· · · · · · K · · · · C
· · · · · · · · · Y

M · · · · G · · · · Z · · · · 7
· · · · · · · · · Q
· · · · O · · · · 8
· · · · · · · · · 9 0

SCOUT SWiRED
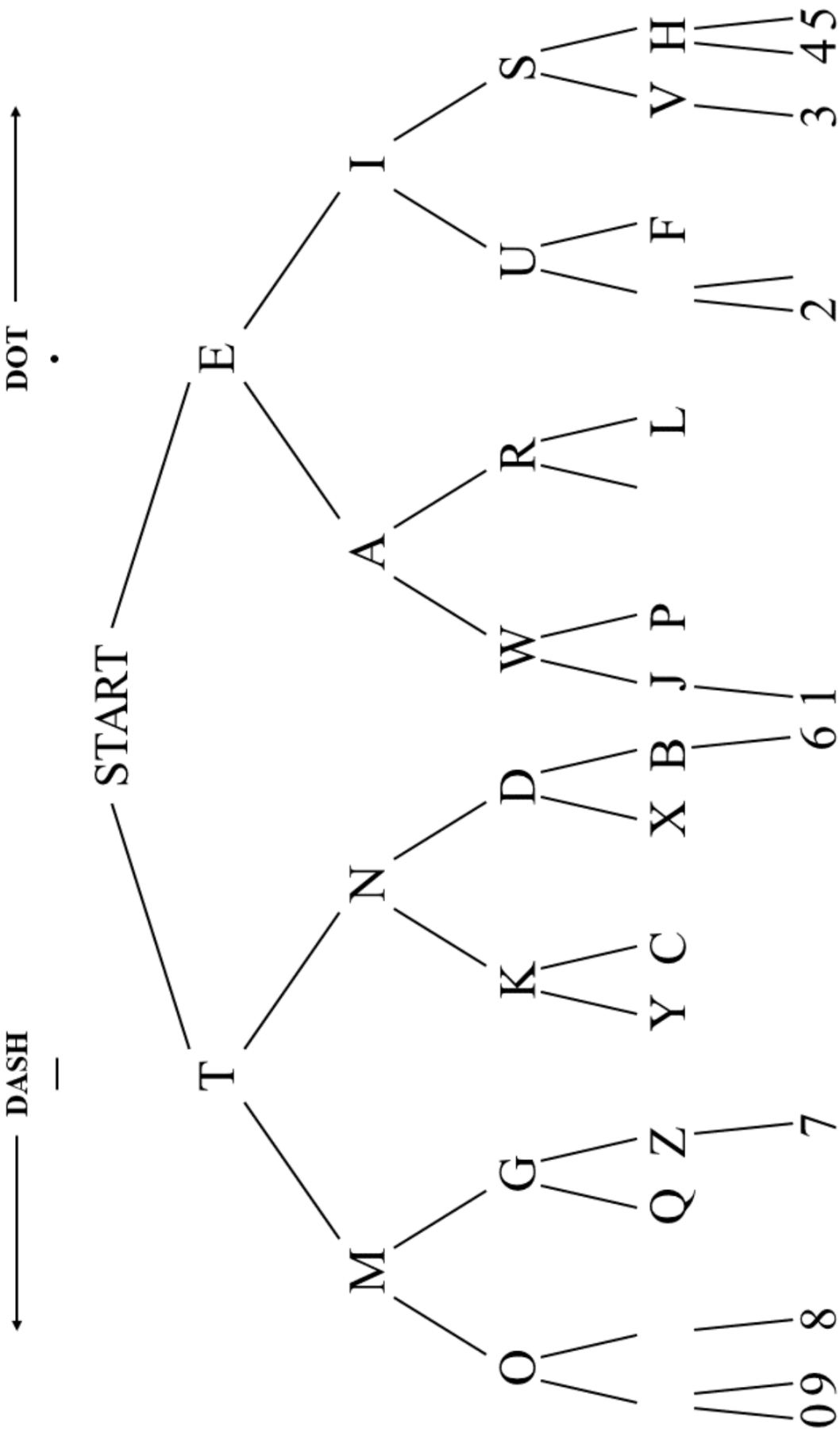
Phonetic Alphabet

A	Alpha	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo
F	Foxtrot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	India	V	Victor
J	Juliet	W	Whiskey
K	Kilo	X	X-Ray
L	Lima	Y	Yankee
M	Mike	Z	Zulu

NATO
OTAN

NATO
phonetic alphabet, codes & signals

The ability to communicate and make yourself understood can make a difference in life-threatening situations – imagine for example that you are trying to alert a search and rescue helicopter of the position of a downed pilot. To ensure clear communication, NATO uses a number of well-known formats which are in general use. NATO standardization agreements enable forces from many nations to communicate in a way that is understood by all.

Some standards can be found in everyday civilian and military life. "Bravo Zulu", typically signalled with naval flags on ships at sea and meaning "well done", is also commonly used in written communication by the military, for example by replying "BZ" to an email.

Phonetic alphabet
The NATO alphabet became effective in 1956 and, a few years later, turned into the established universal phonetic alphabet for all military, civilian and amateur radio communications.

International Morse Code
Morse code transmits text through on-off tones, light-flashes or clicks. It was widely used in the 1800s for early radio communication, before it was possible to transmit voice

Flaghoist communication
Ships use flags as signals to send out messages to each other. The use of flags, known as flaghoist communication, is a fast and accurate way to send information in daylight
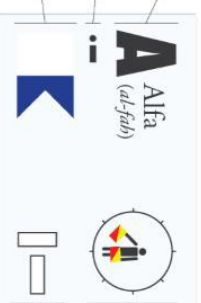
Semaphore
Semaphore is a system in which a person sends information at a distance using hand-held flags – depending on the position of the flags, the message will vary. The signaller holds the flag in different positions that represent letters or numbers.

Panel signalling
Panels are visual signals for sending simple messages to an aircraft. Using a limited code, ground forces can send messages to pilots, for example to request medical supplies.

Numbers

1 One (wun) — · · · ·
2 Two (too) · · — — —
3 Three (tree) · · · — —
4 Four (fow-er) · · · · —
5 Five (fife) · · · · ·
6 Six (six) — · · · ·
7 Seven (sev-n) — — · · ·
8 Eight (ait) — — — · ·
9 Nine (nin-er) — — — — ·
0 Zero (zee-ro) — — — — —

Alphabet

A Alfa (al-fah) ·—
B Bravo (brah-voh) —···
C Charlie (char-lee) —·—·
D Delta (dell-tah) —··
E Echo (eck-oh) ·
F Foxtrot (foks-trot) ··—·
G Golf (golf) ——·
H Hotel (hoh-tel) ····
I India (in-dee-ah) ··
J Juliett (jew-lee-ett) ·———
K Kilo (key-loh) —·—
L Lima (lee-mah) ·—··
M Mike (mike) ——
N November (no-vem-ber) —·
O Oscar (oss-cah) ———
P Papa (pah-pah) ·——·
Q Quebec (keh-beck) ——·—
R Romeo (row-me-oh) ·—·
S Sierra (see-air-rah) ···
T Tango (tang-go) —
U Uniform (you-nee-form) ··—
V Victor (vic-tah) ···—
W Whiskey (wiss-key) ·——
X Xray (ecks-ray) —··—
Y Yankee (yang-key) —·——
Z Zulu (zoo-loo) ——··

Answer Sheet

Caesar Shift Cipher

Q1. Never gonna give you up, never gonna let you down
Q2. A balanced diet means a cupcake in each hand
Q3. Leave this world a little better than when you found it
Q4. A zombie is behind you
Q5. What has four letters, sometimes nine letters, but never five?

AtBash Cipher

Q1. What can fill a room but doesn't take up space?   (Light)
Q2. What kind of band never plays music?   (A rubber band)
Q3. What do you call a bear with no teeth?   (A gummy bear)
Q4. The more you take, the more you leave behind. What am I? (Footsteps)
Q5. What do you call a pig that does karate?   (A pork chop)

Pigpen Cipher

Q1. Ladybugs are awesome
Q2. Smores are overrated
Q3. Robert Baden Powel

Conversation starters

Remember these are starters, not questions to answer, the goal is to talk and make friends not to fill in a bunch of random questions

Where are you from?

What languages do you speak?

When and where was your first scout/guide camp?

What colour is your group scarf?

What is your favourite scouting/guiding activity?

Do you have a favourite badge?

How would you describe yourself in 3 words?

What is a typical food of your country?

If you could travel anywhere in the world right now, where would you go?

Do you have a favourite Scout/Guide song or dance?

What are the names of the different Scouting/Guiding sections in your country?

What is a game your Scouts/Guides like to play?

What is your Patrol Name?

What are your leaders' names? Do they have a special Scouting/Guiding name?

What is the most recent camp or activity you have been on?

What is the longest hike you have ever been on?

How do you say the Scout/Guide promise in your language?

How many countries have you been in contact with over JOTA - JOTI?

Do you play any sports?

Do you play a musical instrument?

What is your favourite camp food?

What is the furthest you have travelled to go to a camp?

What is something you never want to do again?

Tell me about something you want to try but have never had the chance to. If you could have any superpower, what would it be and why?

If you could travel in time, would you go to the future or back to the past?

What is your favourite game?

Tell me about your favourite fictional characters.

Hello my name is _____

I am a Meerkat, Cub, Scout, Rover, volunteer from _____Group name

What is your name and where are you from?

Pick a couple of other questions to ask from the conversation starters.

1.

2.

3.

Record details below of who you connected with:

Name	Group	Country	Something I learnt about them