Geocaching 101/102

May 5, 2012

Geocaching 102

- Part 1 –
  - o Premium Membership Features.
  - o Puzzle Caches!

- Part 2 –
  - o GSAK – Geocaching Swiss Army Knife Advanced Features.

- Part 3 –
  - o Workshops

Geocaching 102

- Overview of Premium Membership features:
  - Pocket Queries.
  - Lists & Bookmarks.
  - Notifications.
- Puzzle Caches – Basics to solving them:
  - Hidden Coordinates.
  - Ciphers & Codes.
  - Lists.
  - Logic.
- GSAK – Geocaching Swiss Army Knife – Bonus Features:
  - Pulling Pocket Queries.
  - Macros – How to install and use them with you GPSr.
  - Publishing Logs – Bulk Load for Power Trails, Pictures & Trackables.

Geocaching 102

- Premium membership:
  - o Not here to sell you on upgrading to a premium membership.
  - o Will highlight the features so you can decide.
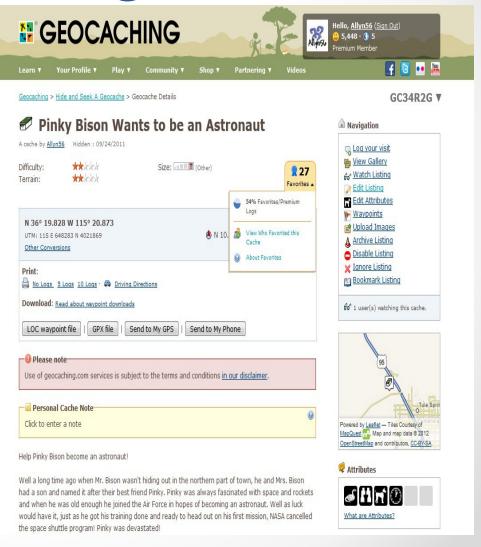 - o Maybe you have one but are not using all of the features.

Geocaching 102

- What is the difference between Basic and Premium Membership?
- Basic:
  - Basic is free.
  - Basic allows you to search, find and log caches.
  - Basic allows you to download cache files in basic format.
- Premium:
  - Current cost is $30 per year.
  - Allows you to access more features from Geocaching.com.
  - Most used features include notifications, pocket queries, gpx file.

Geocaching 102

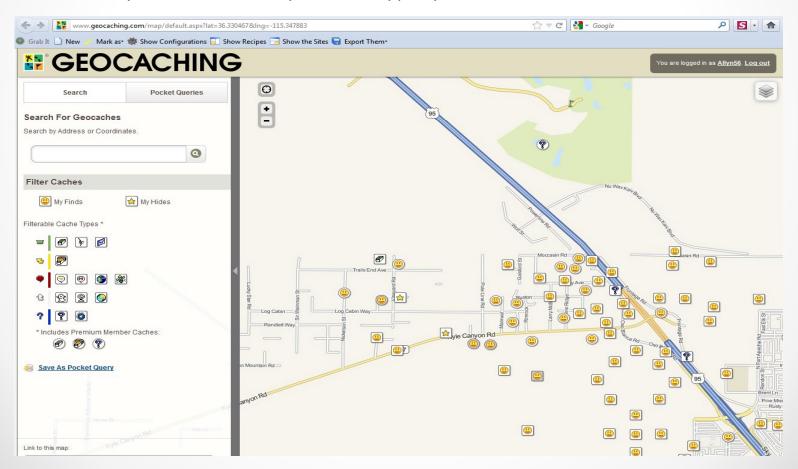| Show me the Difference	Basic Membership Free	Premium Membership $30/Year $10/3 Months
Rate Your Favorites Award Favorite Points to exceptional geocaches that you have found and sort search results by most Favorited caches.		✔
Statistics Visualize and share your geocaching activity with bar graphs and other dynamic infographics.		✔
Maps Use the map view filters to see only the types of geocaches that appeal to you or to remove your hides and finds.		✔
Create and Share Geocaching Lists Organize caches to keep track of Favorites, watch the activity of caches, ignore caches so that they do not appear in your search results, or Bookmark caches into groupings such as "the best caches for out-of-town guests."		✔
Custom Searches Create custom searches based on geocache size, location, attributes and more with Pocket Queries. See how to use this feature		✔
Be Instantly Notified of Geocaches Be the first to find a geocache when you receive Instant Notifications about newly published geocaches on your cell phone or other mobile device.		✔
Caches Along a Route Search for geocaches along a route on your next road trip. Tell us where you are going and we will let you know what geocaches are along the way. See how to use this feature		✔
Support Geocaching.com Support the development and maintenance of the Geocaching.com site.		✔
Create Geocaching Challenges Issue location-based Challenges for others to complete.		✔
Premium Member Access to all Groundspeak Websites Access all Premium features and tools on Geocaching.com, Waymarking.com and Wherigo.com.		✔
Access to Location View coordinates and location information for geocaches.	✔	✔
Share Your Experiences Place your geocaching stories and photos online after writing about your experience in the geocache logbook.	✔	✔
	Basic Membership Free	Premium Membership $30/Year $10/3 Months

Geocaching 102

- Favorites:
  o Premium feature that allows you to award a Favorite point to caches you like and you have found.
  o You must find and log the cache in order to award a Favorite point.
  o For each 9 caches you log as found, you earn a Favorite point that you can award.

Geocaching 102

- Statistics:
  - A Geocaching.com feature to keep track of certain caching statistics. GSAK has a macro that is more versatile but Premium membership has some basic features:
    - Total finds
    - Finds per month
    - Breakdown by year and days of year
    - Cache types
    - Terrain/Difficulty
    - Container types
    - Distance from home
    - Maps
    - Milestones

Geocaching 102

- Map View Filters:
  o Allows you to show only cache type you choose.

Geocaching 102

- Audit Logs:
  - When set as a Premium Member cache as an owner you can view who is looking at your page. Good for me with my puzzles!

Geocaching 102

- Lists:
  - Ignore – Ignore a cache so it does not come up on your search results. Private list for you, cache owner does not know you have ignored the listing.
  - Watch Listing – Allows you to watch a listing and receive notification when anyone posts to the cache. Can be a find, note, did not find, etc. The cache page shows how many people arte watching the cache but the owner does not know who is watching the cache.
  - Bookmark Listing – The ability to create a bookmark or special list where you add caches to the bookmarked list. Can be private to you only or can be made public so other cache owners can use the created list. Helpful for series or power trails so you don't have to create your own each time. Can generate a pocket query from it as well.

Geocaching 102
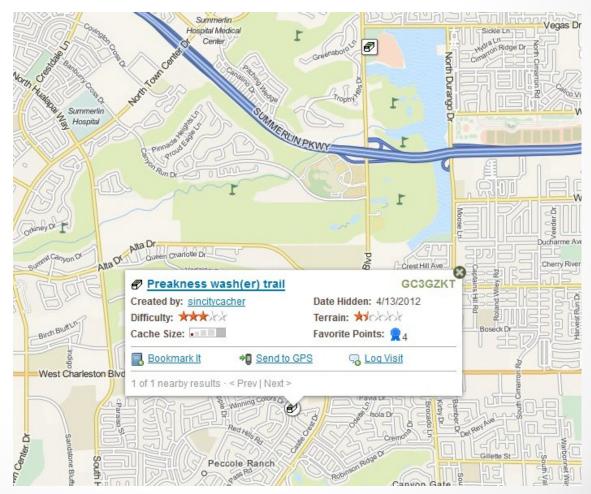
- List Management page:

Geocaching 102

- Bookmarks:
  - Create a new Bookmark
  - Give it a name
  - Add a description if you want
  - Select if you want to share list with others, make it public, or send you an email if someone logs something on list
  - Create Bookmark list

Geocaching 102

- Bookmarks:
  - Add caches to list from cache page or from map page

Geocaching 102

- Bookmarks:
  - Select the list you want to add the cache to and then create bookmark

Geocaching 102

- Caches Along a Route:
  - o Gives you the ability to find caches and store them (like a Bookmark List) along a route.
  - o Works with Geocaching.com map feature or with Google Earth using kml files.
  - o After you create a route you can then perform a pocket query to download the gpx files.
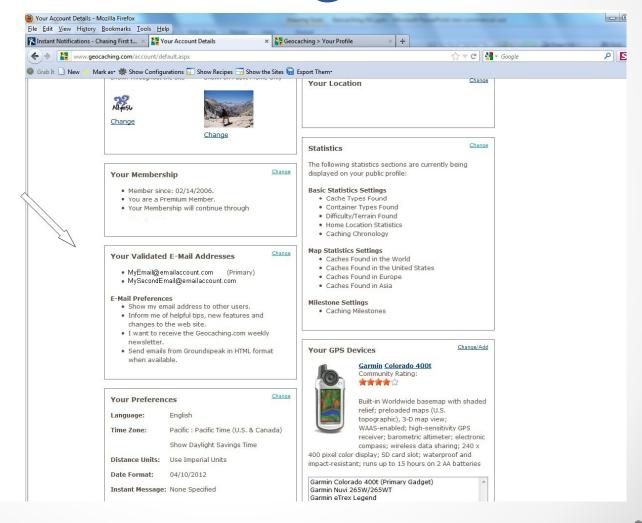 - o Accessed from the Pocket Query page.
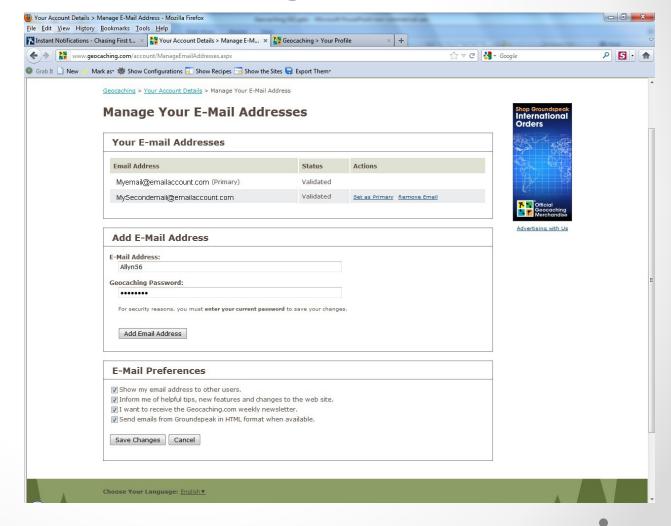
Geocaching 102

- Instant Notifications:
  - You can set up Geocaching.com to notify you of any new caches or other events once they meet your criteria.
  - It will send you an email to a specified account when your criteria is met.
  - Useful for going after First to Finds if you send it to an account you have on a smart phone or cell phone.
  - You first need to enter your email address into your profile and get that email validated. You can enter more than one email address if you like and link those to specific notifications. You could use your primary address for one set of notifications and others for new postings if you like.
  - To setup your email address go to Account Details and scroll down to Your Validated Emails.

Geocaching 102

- This is your account page and this is the place that has your validated email accounts.

Geocaching 102

- This page allows you to enter in additional email addresses for your Geocaching account.

Geocaching 102

- Setting up Notifications:
  - Access your notifications through the Member Features link either from the main page or from your Quick View page.
  - Scroll down the page until you see Instant Log Notification Feature.
  - Click on that link to access the **Instant Notification Service page.**

Geocaching 102

- From this page either click:
  - [Learn how](#) to add a notification or
  - [Create](#) a new notification
- Follow Instructions and you are all set.

Geocaching 102

- Pocket Queries:
    - o One of the main benefits of Premium Membership.
    - o Allows you to do advanced searches based on your criteria.
        - Search by cache type
        - Search by location
        - Search by Difficulty/Terrain
        - Search by Container Type
        - Search by When Placed
        - Search by Attributes
        - Search by Postings
    - o Creates a file that you can download or get emailed to you, depending on size.
    - o Can retrieve up to 1,000 caches!
    - o Can be recurring (set time each week) or one shot times.
    - o Access it through the Pocket Queries link from the main page or on your Quick View page.

Geocaching 102

From this page either click:

   Create a new pocket query or

   How to create a pocket query

Geocaching 102

Select the day of the week you want it to run or leave blank if you want to download when you want

Select the type of cache or Any Type (Default)

Geocaching > Your Pocket Queries > Create/Edit Geocache Pocket Query

New Pocket Query

Query Name: Here is where you name your Pocket Query

Days to Generate: (Server Time: Tuesday, 10 April 2012 16:51:15)

☐ Sun   ☐ Mon   ☐ Tue   ☐ Wed   ☐ Thu   ☐ Fri   ☐ Sat

Choose how often your query should run:

◉ Uncheck the day of the week after the query runs

◎ Run this query every week on the days checked

◎ Run this query once then delete it

Show me 500 caches of

◉ Any Type

◎ **Selected Types:**

☐ Wherigo Cache   ☐ GPS Adventures Exhibit

☐ Traditional Cache   ☐ Multi-cache

☐ Virtual Cache   ☐ Letterbox Hybrid

☐ Event Cache*
(*includes: Lost and Found Event Cache, Mega-Event Cache,   ☐ Unknown Cache*
Groundspeak Block Party, Cache In Trash Out Event, Groundspeak   (*includes: Groundspeak HQ)
Lost and Found Celebration)

☐ Project APE Cache   ☐ Webcam Cache

☐ Earthcache

Geocaching 102

Select container type or Any Container (default)

Select the type of caches you want

Select difficulty and terrain

⦿ Any Container

⦾ **Selected Containers:**

☐ Small   ☐ Large   ☐ Micro

☐ Other (see description)   ☐ Regular   ☐ Unknown

☐ Virtual

That (And)

☐ I haven't found   ☐ I have found

☐ I don't own   ☐ I own

☐ Are available to all users   ☐ Are for members only

☐ Are not on my ignore list   ☐ Are on my watch list

☐ Found in the last 7 days   ☐ Have not been found

☐ Have Travel Bugs   ☐ Updated in the last 7 days

☐ Is Disabled   ☐ Is Enabled

And

☐ Difficulty is [greater than or equal to ▾] [1 ▾]

☐ Terrain is [greater than or equal to ▾] [1 ▾]

Geocaching 102

Select the country
or state or None
Selected (default)

Select starting
point of query

Select distance of
search

Geocaching 102

Select when cache
was placed or
None Selected

The types of
attributes you
want to search by

Or the types you
want to exclude

Placed During

◉ None Selected

○ the last week ▾

○ between April ▾ / 03 ▾ / 2012 ▾ and April ▾ / 10 ▾ / 2012 ▾

Attributes to Include (Click to include/exclude certain attributes.)

Attributes to Exclude (Click to include/exclude certain attributes.)

Geocaching 102

Select which email account to have it sent to, the format of the file and if you want to have it sent as a zip file and if you want the pocket query name in the download filename

Geocaching 102

To manually download the pocket query select the day you want it run (use the current day if you want it now) and then wait for the email notification (usually within minutes)

Geocaching 102

- **Questions on Premium Services?**
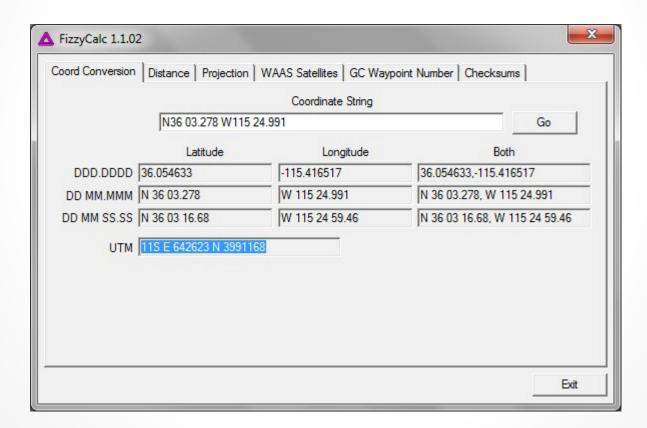
Puzzle Caches

- There are many different types of puzzle caches but almost all require you to find numbers to fit the coordinate system.
    - Hidden Coordinates.
    - Codes and Ciphers.
    - Lists.
    - Word, Logic and Math Puzzles.
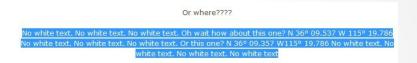   - Movie & TV Series Puzzles.
    - Challenges.

Puzzle Caches

- Puzzle caches should be within 2 miles of the posted coordinates. This is not always the case but it is what Geocaching.com recommends when publishing puzzle caches.

- Two miles will generally put you within the posted degrees of the cache. This means that if you have to solve the North and West degrees, you can look for links that give you these numbers. In our area that will generally be N 36° or W 115° or 114° depending where you are. So look for solutions that give you 3, 6, 1, 5 or 4. The double 1 in the West helps too!

Puzzle Caches

- Review of coordinate systems:

  - **DD MM.MM = N36° 03.278 W115° 24.991**
  - **DDD.DDD = 36.054633,-115.416517**
  - **DD MM SS.SS = N 36 03 16.68, W 115 24 59.46**

  - **UTM = 11S E 642623 N 3991168**

- Helpful tools for coordinates include:
  - Fizzy Calc
  - Google Earth

Puzzle Caches

- Fizzy Calc:

Puzzle Caches

- Hidden Coordinates:
  - White text on Cache page.

    Or where????

    No white text. No white text. No white text. Oh wait how about this one? N 36° 09.537 W 115° 19.786
    No white text. No white text. No white text. Or this one? N 36° 09.357 W115° 19.786 No white text. No white text. No white text. No white text

  - Comments in Cache page User Supplied Content.
    - *<!– My comment here!-->*
  - Modified text, such as Capital letters, *Italics*, etc.
  - Cache page edited items:
    - Hidden date, logs, Travel Bugs or Geocoins, background images, links to other web-pages, Geo-checker pages, etc.
  - Pictures.
  - Sound clips.
  - Coordinates that are not really hidden. Cache is NOT hidden at the posted coordinates.

Puzzle Caches

- Hidden Coordinates:
  - Pictures:
    - Inside picture file.
    - On picture.
    - Layers.
    - Properties.
    - Stenography.
  - Text files as pictures or pictures as text files.
  - Zip file inside picture file.

Puzzle Caches

- On Pictures:

- In Pictures:

Puzzle Caches

- Codes & Ciphers:
  - Morse code.
  - Braille.
  - Character codes.
  - Shift or substitution codes – Caesar, ROT 13, Playfair, Vigenère, etc.
  - ASCII, Hexidecimal, Binary, Octal, Base64, etc.
  - Bar Codes – QR Codes, Postal Zip Codes, Scan Codes, etc.
  - Color Codes.

Puzzle Caches

Dec	Hx	Oct	Char			Dec	Hx	Oct	Html	Chr		Dec	Hx	Oct	Html	Chr		Dec	Hx	Oct	Html	Chr
0	0	000	NUL	(null)		32	20	040	 	Space		64	40	100	@	@		96	60	140	`	`
1	1	001	SOH	(start of heading)		33	21	041	!	!		65	41	101	A	A		97	61	141	a	a
2	2	002	STX	(start of text)		34	22	042	"	"		66	42	102	B	B		98	62	142	b	b
3	3	003	ETX	(end of text)		35	23	043	#	#		67	43	103	C	C		99	63	143	c	c
4	4	004	EOT	(end of transmission)		36	24	044	$	$		68	44	104	D	D		100	64	144	d	d
5	5	005	ENQ	(enquiry)		37	25	045	%	%		69	45	105	E	E		101	65	145	e	e
6	6	006	ACK	(acknowledge)		38	26	046	&	&		70	46	106	F	F		102	66	146	f	f
7	7	007	BEL	(bell)		39	27	047	'	'		71	47	107	G	G		103	67	147	g	g
8	8	010	BS	(backspace)		40	28	050	(	(		72	48	110	H	H		104	68	150	h	h
9	9	011	TAB	(horizontal tab)		41	29	051	)	)		73	49	111	I	I		105	69	151	i	i
10	A	012	LF	(NL line feed, new line)		42	2A	052	*	*		74	4A	112	J	J		106	6A	152	j	j
11	B	013	VT	(vertical tab)		43	2B	053	+	+		75	4B	113	K	K		107	6B	153	k	k
12	C	014	FF	(NP form feed, new page)		44	2C	054	,	,		76	4C	114	L	L		108	6C	154	l	l
13	D	015	CR	(carriage return)		45	2D	055	-	-		77	4D	115	M	M		109	6D	155	m	m
14	E	016	SO	(shift out)		46	2E	056	.	.		78	4E	116	N	N		110	6E	156	n	n
15	F	017	SI	(shift in)		47	2F	057	/	/		79	4F	117	O	O		111	6F	157	o	o
16	10	020	DLE	(data link escape)		48	30	060	0	0		80	50	120	P	P		112	70	160	p	p
17	11	021	DC1	(device control 1)		49	31	061	1	1		81	51	121	Q	Q		113	71	161	q	q
18	12	022	DC2	(device control 2)		50	32	062	2	2		82	52	122	R	R		114	72	162	r	r
19	13	023	DC3	(device control 3)		51	33	063	3	3		83	53	123	S	S		115	73	163	s	s
20	14	024	DC4	(device control 4)		52	34	064	4	4		84	54	124	T	T		116	74	164	t	t
21	15	025	NAK	(negative acknowledge)		53	35	065	5	5		85	55	125	U	U		117	75	165	u	u
22	16	026	SYN	(synchronous idle)		54	36	066	6	6		86	56	126	V	V		118	76	166	v	v
23	17	027	ETB	(end of trans. block)		55	37	067	7	7		87	57	127	W	W		119	77	167	w	w
24	18	030	CAN	(cancel)		56	38	070	8	8		88	58	130	X	X		120	78	170	x	x
25	19	031	EM	(end of medium)		57	39	071	9	9		89	59	131	Y	Y		121	79	171	y	y
26	1A	032	SUB	(substitute)		58	3A	072	:	:		90	5A	132	Z	Z		122	7A	172	z	z
27	1B	033	ESC	(escape)		59	3B	073	;	;		91	5B	133	[	[		123	7B	173	{	{
28	1C	034	FS	(file separator)		60	3C	074	<	<		92	5C	134	\	\		124	7C	174	|		
29	1D	035	GS	(group separator)		61	3D	075	=	=		93	5D	135	]	]		125	7D	175	}	}
30	1E	036	RS	(record separator)		62	3E	076	>	>		94	5E	136	^	^		126	7E	176	~	~
31	1F	037	US	(unit separator)		63	3F	077	?	?		95	5F	137	_	_		127	7F	177	&#127;	DEL

Source: www.LookupTables.com

Puzzle Caches

- Binary, Hexidecimal, Base64, etc.:
  - N36 03.278 W115 24.991
    - Decimal:
      - 78 51 54 32 48 51 46 50 55 56 32 87 49 49 53 32 50 52 46 57 57 49
    - Hexidecimal:
      - 4E 33 36 20 30 33 2E 32 37 38 20 57 31 31 35 20 32 34 2E 39 39 31
  - North Thirty Six Degrees Zero Three Dot Two Seven Eight West One One Five Twenty Four Dot Nine Ninety One
    - Decimal:
      - 78 111 114 116 104 32 84 104 105 114 116 121 32 83 105 120 32 68 101 103 114 101 101 115 32 90 101 114 111 32 84 104 114 101 101 32 68 111 116 32 84 119 111 32 83 101 118 101 110 32 69 105 103 104 116 32 87 101 115 116 32 79 110 101 32 79 110 101 32 70 105 118 101 32 84 119 101 110 116 121 32 70 111 117 114 32 68 111 116 32 78 105 110 101 32 78 105 110 101 116 121 32 79 110 101
    - Hexidecimal:
      - 4E 6F 72 74 68 20 54 68 69 72 74 79 20 53 69 78 20 44 65 67 72 65 65 73 20 5A 65 72 6F 20 54 68 72 65 65 20 44 6F 74 20 54 77 6F 20 53 65 76 65 6E 20 45 69 67 68 74 20 57 65 73 74 20 4F 6E 65 20 4F 6E 65 20 46 69 76 65 20 54 77 65 6E 74 79 20 46 6F 75 72 20 44 6F 74 20 4E 69 6E 65 20 4E 69 6E 65 74 79 20 4F 6E 65

Puzzle Caches

- Fonts:
  - North Thirty Six Degrees Zero Three Dot Two Seven Eight West One One Five Twenty Four Dot Nine Ninety One

  - Wingdings:
    - ☠□□◆≈ ❄≈✳□◆⌧ ◆✳⌧ ⍓♏㋏□♏♏◆ ☾♏□□ ❄≈□♏♏ ❑□◆ ❄◆□ ◆♏❖♏■ ☜✳㋏≈◆ ♓♏◆◆ ⊞♏■♏ ⊞♏■♏ ☜✳❖♏ ❄◆♏■◆⌧ ☞□◆□ ❑□◆ ☠✳■♏ ☠✳■♏◆⌧ ⊞♏■♏

  - SyMusic
    - 𝄞♀):♅⊕♄ ⊸♄♭♀⊕Ψ ⊸♭♁ ∘∘♮♃∘∘♀ ♪ ∘♁♀): ⊸♄♃∘∘ ♀♂):⊕ ⊸♄⊖): ⊸♄◯♪ 𝄞♪♭♄⊕ ∘♭♮♄⊕ ⊸∘♀⊕ ◯:𝄞∘ ◯:𝄞∘ ♪♭♃∘ ⊸♄◯𝄞⊕Ψ ♪♀):♂♄ ◯♀):⊕ 𝄞♪♭♄∘ ◯ 𝄞♪♭𝄞⊕Ψ ◯:𝄞∘

Puzzle Caches

- Bar Codes:
  - QR Codes – Can display text, a link to a web-page, send an email, or a text message. Best to have a Smart phone application that reads these in the field.

  - PDF format – Can be used to hide text such as this.

  - Postal Code – As seen on envelopes for zip codes. Limited to numbers.

  - ISBN Codes – International Standard Book Number - The ones used for books. Limited to 9 or 13 digits.

ISBN 0-1234567-8-9

9 780123   456786

Puzzle Caches

- Lists:
  - Music.
  - TV Series.
  - Movies.
  - States & Countries.
  - Books.
- Internet searches.
- Watching the shows or listening to the music.

Puzzle Caches

- Word, Logic and Math Puzzles:
    - Converting words to numbers.
    - Solving Logic questions to find numbers for puzzles.
    - Doing simple to complex math equations.
    - Geometry puzzles – Areas, Triangles, etc.
    - Sudoku.
    - Crossword.
    - "Find a Word".
    - Mazes.

Puzzle Caches

- Some links to help you out:
  - Puzzle Solving Caches:
    - NorCal Puzzle Solving Lesson 1: Strategy - http://coord.info/GC2GXZK
    - How Do I Solve All These &#$@! Puzzle Caches - http://coord.info/GC25WQJ
    - Puzzle Solving 101 - Lesson 1: Strategy - http://coord.info/GCYXZ1
  - Cipher Links:
    - Cipher Tools - http://rumkin.com/tools/cipher/
    - Translator – Binary, Hex, Base64, - http://home2.paulschou.net/tools/xlate/
    - Purple Hell Riddle Tools - http://www.purplehell.com/riddletools/
  - Bar Code Readers:
    - Clear Image - http://online-barcode-reader.inliteresearch.com/
  - Fizzy Calc - http://www.fizzymagic.net/Geocaching/FizzyCalc/

Puzzle Caches

- **Questions on Puzzle Caches?**