## BAPHL XII Introduction



# Welcome to this special Winter Holiday Edition of BAPHL XII! 

 Vernal Equinox Groundhog Day St. Patrick's Day PurimOkay, so we weren't quite as on top of the timeline as we might have liked. Things kept coming up: first there was this other big puzzle event in Cambridge every January, then that record-breaking snowfall ... so it's now happening in April. But perhaps you're not yet completely sick of holiday displays, light-up snowmen, and endless iterations of "The Little Drummer Boy", and so will enjoy this winter wonderland of puzzles. Oh, and you'll come across some handwritten corrections like the ones above and below on some of the puzzles due to our rescheduling: the changes aren't clueful, just a badge of our shame...
## SPRING

WHNTERIS COMING!! We now have BAPHLs in Spring, Summer, and Fall, so why not do one in the winter? To celebrate this wonderful holiday season, Phlogizote is hosting THREE holiday parties around Harvard Square. The whole shebang starts off with an old-fashioned gift grab bag. The gift your team received determines which party you go to first:

- If you got a candy cane, go the Christmas party at Sever Yard
- If you got a dreidel, go to the Menorah lighting at JFK Park
- And if you got a stick of gum (suitable for spicing up bagel dough), go to the Festivus dinner at Radcliffe Yard
(Consult your map to help you find them.) When you get to a holiday party, look for the Phlogizotinator with the Happy New Year tiara, who will check you in and give you the four puzzles associated with that holiday. Note that unlike some previous BAPHLs, you are free to use the internet. We tried to design puzzles where you wouldn't need to, but a couple of them may benefit from a Google or two for some teams - it's up to you to decide whether you'll have more fun using the Net or not.

You can check your answers with the Phlogizotinator (and ask for hints, though if you're a Blizzard team, we might be stingy with them). After an hour, or after your team has solved three puzzles, you can move on if you like. Note that some of the puzzles are location specific (this is noted on the puzzle itself), and the location-specific material is always near where you got the puzzle. Once you've solved three puzzles or an hour has passed, you'll receive additional material for the meta-puzzle and get directions to the next holiday party. Each meta-puzzle will provide some information about the holiday.
why BAPHL XII is being held in April rather than December.
Once you've solved all three of the metas, come back to this starting point at Winthrop Square and find the Phlogizotinator who will give you the meta-meta-puzzle.

If you have questions or problems, or are simply not having a good time, you can contact Phlogizote HQ at xxx-xxx-xxxx or xxx-xxx-xxxx. Good luck and happy holidays!

## BAPHL XII Answer Sheet

## Team Name

PUZZLE


$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

ANSWER

## BAPHL XII—General Reference Sheet

| Standard <br> Alphabet |  | NATO | Braille | Morse Code | Semaphore | Binary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | A | Alfa | ：$\because$ | － | Si | 00001 |
| 2 | B | Bravo | $\because$ | $\cdots \bullet \bullet$ | － | 00010 |
| 3 | C | Charlie | $\because$ | ー・ー・ | i | 00011 |
| 4 | D | Delta | $\because:$ | －•• | 号 | 00100 |
| 5 | E | Echo | $\because$ | － | 0 | 00101 |
| 6 | F | Foxtrot | $\because$ | $\bullet \bullet \bullet$ | \％ | 00110 |
| 7 | G | Golf | $\because:$ | － | is | 00111 |
| 8 | H | Hotel | $\because$ | $\bullet \bullet \bullet \bullet$ | － | 01000 |
| 9 | 1 | India | $\because$ | － | －10 | 01001 |
| 10 | J | Juliet | $\because:$ | －ローロ | 际 | 01010 |
| 11 | K | Kilo | $\because$ | ー・ロ | －10 | 01011 |
| 12 | L | Lima | $\because$ | $\bullet \bullet \bullet \bullet$ | $4 \pi^{\circ}$ | 01100 |
| 13 | M | Mike | $\because$ | － | －1i | 01101 |
| 14 | N | November | $\because:$ | － | Sis | 01110 |
| 15 | 0 | Oscar | $\because$ | －ロー | \％i | 01111 |
| 16 | P | Papa | $\because$ | －ーロ・ | － 71 | 10000 |
| 17 | Q | Quebec | ：$:$ | －․․ | $\cdots$ | 10001 |
| 18 | R | Romeo | $\because$ | －•• | $\cdots$ | 10010 |
| 19 | S | Sierra | $\because$ | $\bullet \bullet \bullet$ | －io | 10011 |
| 20 | T | Tango | $\because:$ | － | \％ | 10100 |
| 21 | U | Uniform | $\because$ | －・ロ | － | 10101 |
| 22 | V | Victor | $\because$ | $\bullet \bullet \bullet$ | 厚 | 10110 |
| 23 | W | Whiskey | $\because:$ | －ロー | 市 | 10111 |
| 24 | X | X－ray | $\because$ | －•・ロ |  | 11000 |
| 25 | Y | Yankee | $\because:$ | ー・ロー | $\cdots$ | 11001 |
| 26 | Z | Zulu | $\because$ | ーロ・• | $\stackrel{\square}{\square}$ | 11010 |


| Greek Alphabet |  |  | Hebrew Alphabet |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | A $\alpha$ | alpha | 1 | א | alef |
| 2 | B $\beta$ | beta | 2 | Э | bet |
|  |  |  |  | ב |  |
| 3 | 「 $\gamma$ | gamma | 3 | $\lambda$ | gimel |
| 4 | $\Delta \delta$ | delta | 4 | ד | dalet |
| 5 | E \＆ | epsilon | 5 | ה | he |
|  |  |  | 6 | 1 | vav |
| 6 | Z $\zeta$ | zeta | 7 | T | zayin |
| 7 | H $\eta$ | eta | 8 | $\Pi$ | het |
| 8 | $\Theta \theta$ | theta | 9 | D | tet |
|  |  |  | 10 | ， | yod |
| 9 | 1 l | iota | 11 | 3 | kaf |
| 10 | K к | kappa |  | J |  |
| 11 | $\wedge \lambda$ | lambda |  | 7 |  |
|  | $\wedge \lambda$ |  | 12 | ל | lamed |
| 12 | M $\mu$ | mu | 13 | מ | mem |
| 13 | N v | nu |  | $\square$ |  |
| 14 | 三 ${ }^{\text {c }}$ | xi | 14 | נ | nun |
| 15 |  | omicron |  | 1 |  |
|  | 0 o |  | 15 | D | samekh |
| 16 | $\Pi \pi$ | pi | 16 | ע | ayin |
| 17 | P $\rho$ | rho | 17 | $\bigcirc$ | pe |
|  |  |  |  | 9 |  |
| 18 | $\Sigma \sigma \zeta$ | sigma |  | 7 |  |
| 19 | T T | tau | 18 | $צ$ | tsadi |
| 20 | Y | upsilon |  | $Y$ |  |
|  | Yu |  | 19 | P | qof |
| 21 | $\Phi \varphi$ | phi | 20 | 7 | resh |
| 22 | X X | chi | 21 | שׁ | shin |
| 23 | $\psi \Psi$ | psi |  | ש |  |
|  | $\psi$ |  | 22 | 丹 | tav |
| 24 | $\Omega \omega$ | omega |  | $\Omega$ |  |

## BAPHL XII—Ranking of Hands in Poker

The ten types of five-card Poker hands are listed below in order from highest-ranked to lowest-ranked. Two hands of the same type are compared further by comparing (in order) the card values in the right-hand column until a difference is found; card values are, highest to lowest: A, K, $\mathbf{Q}, \mathbf{J}, \mathbf{1 0}, \mathbf{9 , 8 , 7 , 6 , 5 , 4 , 3 , 2 \text { . If two hands of the same type have all their card }}$ values the same, they are tied.)

| Hand type | Card values to compare, in order, <br> for two hands of this type |
| :--- | :--- |
| Royal Flush <br> A 10JQKA Straight Flush (see below) | (All royal flushes are tied) |
| Straight Flush <br> A Straight (see below) that is also a Flush (see below) | (Same as for Straight) |
| Four of a Kind <br> A set of four same-valued cards, and one extra card | 1. Four-card set <br> 2. Extra card |
| Full House <br> A set of three same-valued cards, and a set of two same-valued cards | 1. Three-card set <br> 2. Two-card set |
| Flush <br> Five cards of the same suit | All cards, in order, highest to lowest |
| Straight <br> Five cards in consecutive sequence (A may come before 2, or after K, <br> but not both) | Card coming "last" in the sequence <br> (so A2345 is lower than 23456, say) |
| Three of a Kind <br> A set of three same-valued cards, plus two extra (unmatched) cards | 1. Three-card set <br> 2. Extra cards (higher first, then lower) |
| Two Pair <br> A set of two same-valued cards, another set of two same-valued cards <br> (with a different shared value), and one extra card | 1. Higher two-card set <br> 2. Lower two-card set <br> 3. Extra card |
| One Pair <br> A set of two same-valued cards, plus three extra (unmatched) cards | 1. Two-card set <br> 2. Extra cards (in order, highest to lowest) |
| High Card <br> None of the above | All cards, in order, highest to lowest |



