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BY SID SACKSON

A Stock Market Game   by Sid Sackson

FINANCIER

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MARKET PRICE

ODD TOTAL ↑

EVEN TOTAL ↕

CAPITAL
5 5 10 10 10 20 20
5 5 10 10 10 20 20

CO. STOCK   VALUE
1 2 3 4 5 6

NAME   UNSPENT CAPITAL
TOTAL

A paper and pencil game for 2, 3, or 4 players.

Object: To make the most money by investing in stocks. Six companies are represented, and players try to raise the market price of stocks they own, and to lower the market price of their opponents' stocks.

Equipment: One game sheet like the two shown at left, two dice, pencil for each player.

Preliminaries: Starting market prices for the six companies are determined by any player throwing the dice six times, once for each company. The total for each company is entered to the right of the company name: in the column headed 4, if 4 are playing; 3, if 3 are playing; 2, if 2 are playing.

Each player throws the dice, and high total plays first. Play then rotates to the left. Each player takes possession of a capital/stock area by writing his name in one of the indicated spaces.

Play:

1. In his turn a player throws the dice. He chooses the company represented by one die and changes its market price by the number on the other die. If the total of the two dice is **odd**, the market price can only go **up**. If the dice total is **even** the market price can go either **up** or **down**. (For example: a player throws a 2, 5. He must either raise the market price of "Big Sky Mining" 5 points, or raise the market price of "Energy Corp." 2 points. With a throw of 3, 3, a player must either raise or lower the market price of "Creative Games" by 3 points.) The new market price is entered in the next space to the right. A player may not lower a market price if this would put it below 1.

2. After changing a market price, the player can, but does not have to, buy **up to three shares** of stock in one of the two companies thrown—regardless of which market price he changed. If the player chooses to buy the company changed, he pays for the stock at the lower of the two market prices. Enough capital squares (in denominations of 5, 10, or 20) are crossed off to cover the cost, or as close above it as possible. The shares purchased are noted in the player's stock area to the right of the proper number. A player cannot own more than ten shares in a company. If a player uses all of his capital, he can no longer buy stock.

3. When there are no further spaces to the right, a company's market price cannot change. When one die thrown by a player represents a company whose market price cannot change, the market price of the company represented by the other die *must* be changed. When both dice thrown by a player represent companies whose market prices cannot change, *the game ends immediately.*

Winning: The values of each player's stock, based on the market prices at the end of the game, are entered in the columns at the right of each stock area. Any unspent capital is entered at the bottom. The player with the highest total is the winner.

The Great Races
by Sid Sackson

A paper-and-pencil game for 2, 3, or 4 players.

Object: To score the most points by winning—or by placing second—in as many of the eleven races as possible. Each player enters the various races according to the throw of the dice, and then advances toward each finish line by re-throwing the number of that race.

Equipment: One game sheet (see illustration), four dice, pencil for each player.

Preliminaries: Each player throws the dice and the one with the highest total plays first. This player puts his initials at the top of the first column in the scoring area marked "Players." The next player (the person sitting to the left of the first player) places his initials at the top of the second column. And so on. In each race entered, a player will use the track that corresponds to his scoring column—that is, the first player will use the uppermost track in each race, the second player will use the track just below that, and so on.

Play: A player throws the four dice when it is his turn. The player then divides them into two pairs in any manner he chooses. For each pair of dice, the player marks off one space on his track in the race corresponding to the total of the two dice. For example: a player throws 2-3-5-6. The player can mark off one space in race 5 (2+3) and one in race 11 (5+6), or one space in race 7 (2+5) and one in race 9 (3+6), or *two* spaces in race 8 (2+6 and 3+5). As races are finished, players may find that they are unable to use one or even both of their dice totals.

Scoring: The player marking off the last space in a race has won that race. The winner of a race records the points for first place (higher number in the crossed flags at the end of the race) in his scoring column. If one or more of the other players has passed the double vertical line (which occurs in different positions in the various races), the one who is the farthest advanced scores the points for second place (lesser number in the crossed flags). In case of a tie, the player—among those tying—in the lowest track (that is, the player who started later) wins the points. If no player has passed the double line at the time a race is won, there is no score for second place in that race.

Winning: When all eleven races have been completed, the player with the highest score is the winner. In case of a tie, the player—among those tying—whose scoring column is farthest to the right (who played later at the start of the game) is the winner.

RACE #	TRACK	SCORE	PLAYERS
2		10 / 6	
3		9 / 5	
4		8 / 4	
5		7 / 4	
6		6 / 3	
7		5 / 3	
8		6 / 3	
9		7 / 4	
10		8 / 4	
11		9 / 5	
12		10 / 6	
RACE #	TRACK	SCORE	TOTAL

There are a great many games that call for deductive reasoning—where players are given clues and, in accordance with a set of rules, put them together to arrive at a preset solution. Among current best sellers, Master Mind is a prime example. There are, on the contrary, very few games based on inductive reasoning—where players "conduct experiments" in an effort to *discover* rules. And if it weren't for Bob Abbott, the inventor of Eleusis, there probably would be none.

Martin Gardner introduced Eleusis to his *Scientific American* readers in June of 1959. It stimulated great interest in the scientific and educational communities, and that interest has never died out.

Eleusis, named for the ancient Greek Eleusinian Mysteries, was conceived in 1956 while Bob was in college. The basic idea is brilliantly simple. One player—originally called the dealer, but later elevated to "Nature" or, among some players, "God"—devises a secret rule that specifies whether or not a particular card can be added to a line of face-up cards. Each of the other players in turn offers a card from his hand. If the card is in agreement with the rule, the dealer adds it to the line; if not, the player leaves it face up before him as a "mistake" card. By studying the pattern of cards accepted, and those rejected, players attempt to determine the secret rule. This can be a slow process of trial and error, or can come in a sudden flash of intuition.

My wife and I met Bob in 1963 and found it quite fitting that he had created a game in which players make up their own rules. In his personal life he insists on the same privilege. At that time he earned his living as a typist, working by the hour, and only enough hours for the bare necessities. The remaining time he devoted to worthwhile pursuits—primarily games. His attire was also unique. On winter visits he would peel off layer after layer of assorted clothing, including a second pair of pants, but a knitted cap remained on his head the entire evening.

His apartment in Manhattan's East Village had a nostalgic charm, with the bathtub in the kitchen and community toilet off the outside hallway. Now Bob has found a successful career as a computer programmer and has moved to posher surroundings. But he still plays according to his own rules.

Back in 1963 and the years following I had the pleasure of playing Eleusis a dozen or more times. But there were two flaws in the game that bothered all of us. One was the difficulty of remembering *when* a particular "mistake" card had been played. The other was the situation where a player might have a good idea of the dealer's rule but, when his turn came, had no cards in his hand that were playable under the rule.

Actually the first of these problems had already been solved. In December of 1962 Martin D. Kruskal, a mathematical physicist at Princeton University, published a variation of Eleusis called Delphi. In his variation he came up with the concept of a "mainline" and "sidelines" (which will be explained shortly).

Solving the second problem proved to be much more difficult. I was in on some of Bob's earlier experiments, though as the years moved along the pressure of other work caused me to lose touch. It was therefore a pleasant surprise to find Bob's booklet on the "New Eleusis" in my mail one morning last September, closely followed by Martin Gardner's account of it in the October *Scientific American*.

So here, with one nonessential and optional exception to be noted at the end, are the latest rules for playing Eleusis.

Number of players: From three to eight can play. In each round, one player is the dealer, who devises the secret rule. Usually this honor goes to a volunteer who thinks he has an interesting one. But no player can be dealer twice during a game. If time permits, a full game consists of each player being dealer for one round; but when some players don't get the opportunity, there are provisions for scoring an abbreviated game. When playing for blood, players draw cards for the order in which they become dealer.

The cards: Generally two 52-card decks shuffled together are sufficient. But keep a third deck on hand to use if you get down to four cards or less. Once the third deck is shuffled in, don't bother removing it. Since the layout can become quite extensive, miniature cards are a good idea. Lacking these, you will probably have to place the layout on the floor.

Object: Basically the idea is to get rid of your cards as quickly as possible by playing them to a layout in accordance with the secret rule. The closer you get to determining the rule, the better you will be able to play, but discovering the rule is not in itself the objective.

The secret rule: The dealer devises a rule stating when a card can be correctly added to the mainline (see sample layout), and when it is incorrect and must be placed in a sideline. Following are a few examples of secret rules. (The term "last card" refers to the most recently played card in the mainline, or to the "starter" card before any cards have been accepted. When a numerical value is involved, an ace is usually 1, jack is 11, queen is 12, and king is 13.)

"If the last card is black, play a 7 or higher. If the last card is red, play a 6 or lower." (This is the rule in the example.)

"If the last card is a spade, play a diamond; if a diamond, play a club; if a club, play a heart; if a heart, play a spade."

"If the sum of the last two cards is even, play a red card. If the sum of the last two cards is odd, play a black card. Any card can be played on the starter card."

The secret rule should depend only upon the cards in the mainline. In no case can it involve external features, such as the player's sex, the hand he uses, his position in the rotation, etc.

(In order to end up with a good score, a dealer should try for a rule that some players will get quickly while others have difficulties. But the dealer should be careful not to underestimate the difficulty of his rule. Somehow it always looks easier from his point of view.)

The dealer writes the rule on a sheet of paper, to refer to if necessary as the game progresses, and to document his decisions when the round is finished. Before play begins, the dealer may, if he wishes, give a hint concerning the rule. This could be something like "Suits are not involved," "The rule involves the last two cards in the mainline," etc. Once play begins the dealer may not give any help.

The deal: The dealer deals fourteen cards to each of the other players and none to himself. He then turns a starter card face up. To determine the first player, the dealer starts counting to his left and continues (excluding himself) until he reaches the number on the starter card. Play rotates to the left.

If the dealer turns a starter card that is not acceptable under his secret rule, he shuffles it into the deck and turns up another. The first player, however, is determined by the original starter card.
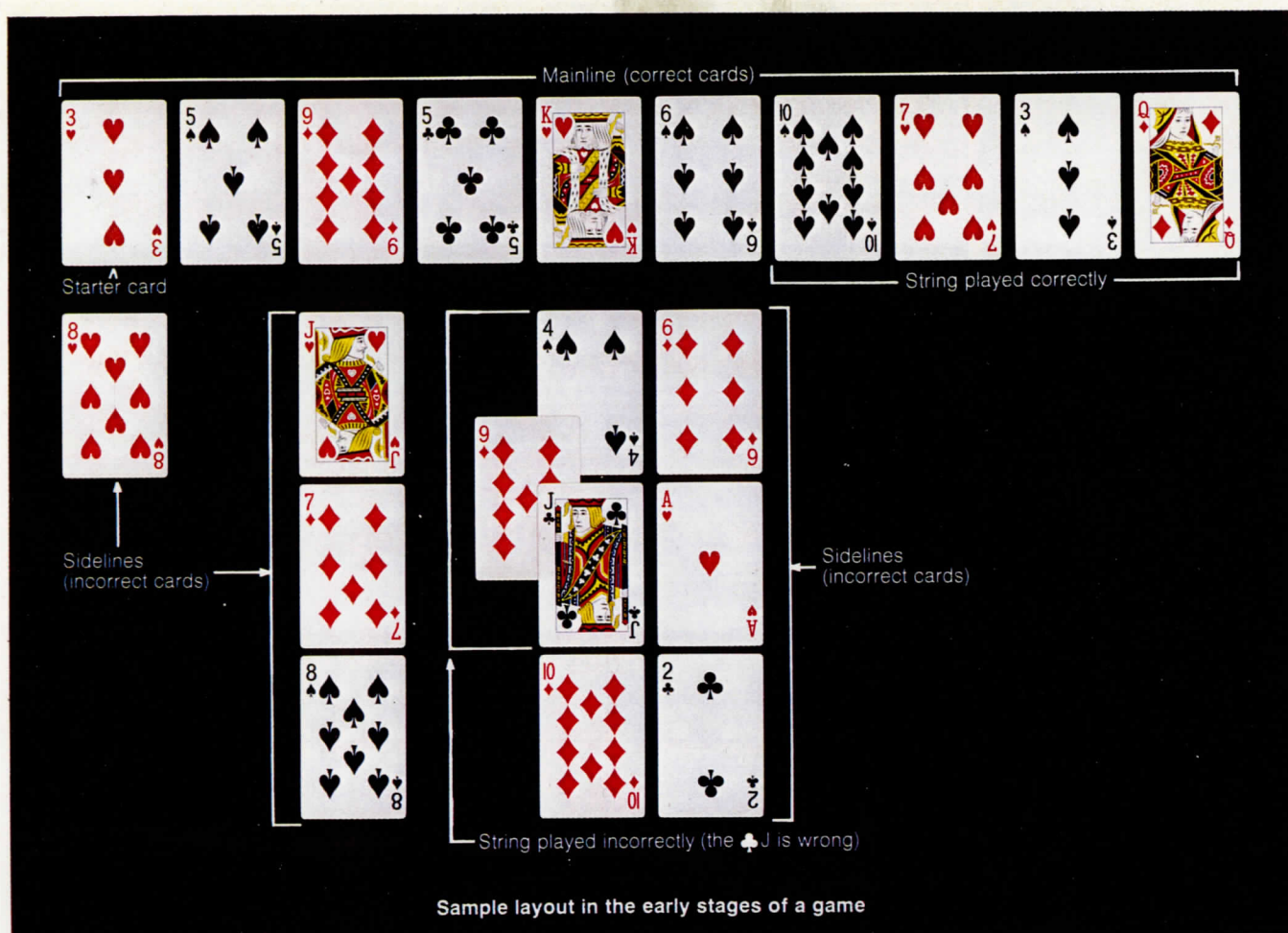
The play: In his turn, a player must play one card, play a string of cards, or declare that he has no play.

Playing one card: The player takes the card from his hand and shows it to the dealer. If the card is correct, it is placed to the right of the last card in the mainline. If it is incorrect, it is placed below the last card played—either starting or continuing a sideline. When a player is incorrect, the dealer gives him two cards from the deck to add to his hand. A correct play reduces the hand by one card; an incorrect play increases it by one.

(In the sample layout, the first player tries to play the ♡8 and is incorrect. He is dealt two cards. The second player tries the ♠5 and is correct. The play of the ◇9 by the next player is also correct, but the next three turns—♡J, ◇7, and ♠8—fail to meet the rule, and are placed one below the other in a sideline.)

Playing a string of cards: A player who thinks he has discovered the rule may attempt to play a string of two, three, or

Mainline (correct cards)

Starter card

String played correctly

Sidelines (incorrect cards)

Sidelines (incorrect cards)

String played incorrectly (the ♣J is wrong)

Sample layout in the early stages of a game

four cards. These are shown to the dealer overlapped slightly so that their order is indicated. If each individual card would be correct if played by itself, the string is correct and is added to the mainline with no overlapping. (In the sample layout, the last four cards were correctly played as a string.) If one or more cards in the string are incorrect, the entire string is placed in a sideline, maintaining the overlapping to indicate for future reference that they were played as a string. The dealer does not state which cards are wrong. When a player plays an incorrect string, the dealer gives him twice as many cards from the deck as there were in the string.

(In the sample layout, a player mistakenly surmises that the secret rule calls for suits to be played in the order heart, spade, diamond, club, heart, etc.—the second rule in the examples given on the previous page—and plays a string of three cards. Since the ♣J is wrong under the rule actually used, the string is placed in a sideline and the player receives six cards from the dealer.)

Declaring no play: When a player feels that he knows the rule but has no card in his hand that he can play correctly, he is permitted to declare "No play." He exposes his hand for the dealer to check. If he indeed has no correct card, the dealer takes his hand, counts the cards, and places them at the bottom of the deck.

He then deals the player a hand of four fewer cards than he originally held. If his original holdings were four or fewer than four, the round is ended.

If the dealer finds one or more correct cards, he chooses any one of these and places it on the mainline. The player picks up the rest of the hand and is dealt another five cards as a penalty.

Expulsion: After thirty cards have been played to the layout—either to the mainline or the sidelines—a player who plays an incorrect card, plays an incorrect string, or mistakenly declares no play is expelled for the remainder of the round. He is given the penalty cards for his incorrect play and keeps his hand to be scored at the end of the round.

To keep track of the number of cards played, it is useful to place a marker of some kind on every tenth card. (In the sample layout such markers would be placed on the ♠4 and the ♠3.)

If all except one player have been expelled, that player continues until either he plays out all his cards or he himself makes a mistake.

Scoring: A round ends when one player gets rid of all his cards, or when all the players have been expelled. At this time each player counts his remaining cards and the score is determined as follows:

Each player scores the difference between the number of his cards and those held by the player with the most cards. If

a player has no cards left, he receives an additional bonus of four points. The dealer scores the same as the highest scoring player. (As an example, at the end of a round four players hold the following numbers of cards: 17, 17, 5, and 0. Each player with 17 cards scores zero, the player with 5 cards scores twelve, and the player with 0 cards scores seventeen points plus four points bonus, for a total of twenty-one points. And the dealer also scores twenty-one points.)

If a game is ended before all players have had a chance to be the dealer, each player who has not been the dealer adds ten points to his score as compensation.

So now you know everything about Eleusis, except how to become a Prophet. After you have played awhile you will undoubtedly find yourself discovering the secret rule before the other mortals. To lord it over them, you can declare yourself a Prophet. If you are right, your score goes way up; if you are wrong you will be overthrown and suffer the consequences. To find out how it all works—and it is a little complicated—send $1.00 for a booklet with the complete rules for "The New Eleusis" to Robert Abbott, Box 1175, GPO, New York, NY 10001. □

Oil Strike!

by Sid Sackson

A paper and pencil game for 2, 3, or 4 players.

Object: To strike the most oil. Sections containing from two to four drilling sites are leased and then the sites are drilled—resulting in a strike or a dry hole. Sites next to producing wells have a better chance of striking oil.

Equipment: One gamesheet, two dice, pencil for each player.

Preliminaries: Each player throws the dice and high total plays first. The first player chooses a section with two sites and claims it by writing his initials in it. The player to the left then chooses a section with either two or three sites. If 3 or 4 are playing, each chooses any remaining section he wishes.

Play:

1. In his turn, a player picks one of his sites and throws the dice. If the total is *7 or lower*, it is a dry hole—marked with a cross. If the total is *8 or higher*, it is an oil strike—marked by blackening in the circle. A second site is drilled in the same manner. Each player, after his turn at drilling, chooses any remaining section, until all sections have been claimed. When no sections remain to be claimed, a turn consists only of drilling. If a player runs out of sites to drill, the other players continue with their sites.

2. When a site is drilled that is adjacent—including diagonally—to one or more producing wells (regardless of who owns them), the number of adjacent wells is added to the dice throw and a total of *8 or higher* results in an oil strike.

3. When drilling a site, a player may try for "extra production" by announcing either "double well" or "quadruple well" before throwing the dice. For a double well the dice throw plus the number of adjacent producing wells must reach a total of *10 or higher*. (If the total is *9 or lower*, it is a dry hole.) For a quadruple well the total must be *12 or higher*. Double or quadruple wells are marked by blackening in the circle. They add a count of only one to adjacent sites drilled in the future.

Scoring: Each player places his initials in one of the corner spaces. Each time a player strikes oil, he marks off one of the scoring wells in his area. For a double well he marks off two wells. For a quadruple well he marks off four wells. If a player strikes oil in all of the sites of a section (regardless of the number of sites in the section) he marks off two additional scoring wells as a bonus.

Winning: When 2 play, a player wins by marking off 35 scoring wells. When 3 play, 25 wells. When 4 play, 20 wells. If all the sites are drilled without any player reaching the required total, the player with the most wells marked is the winner.
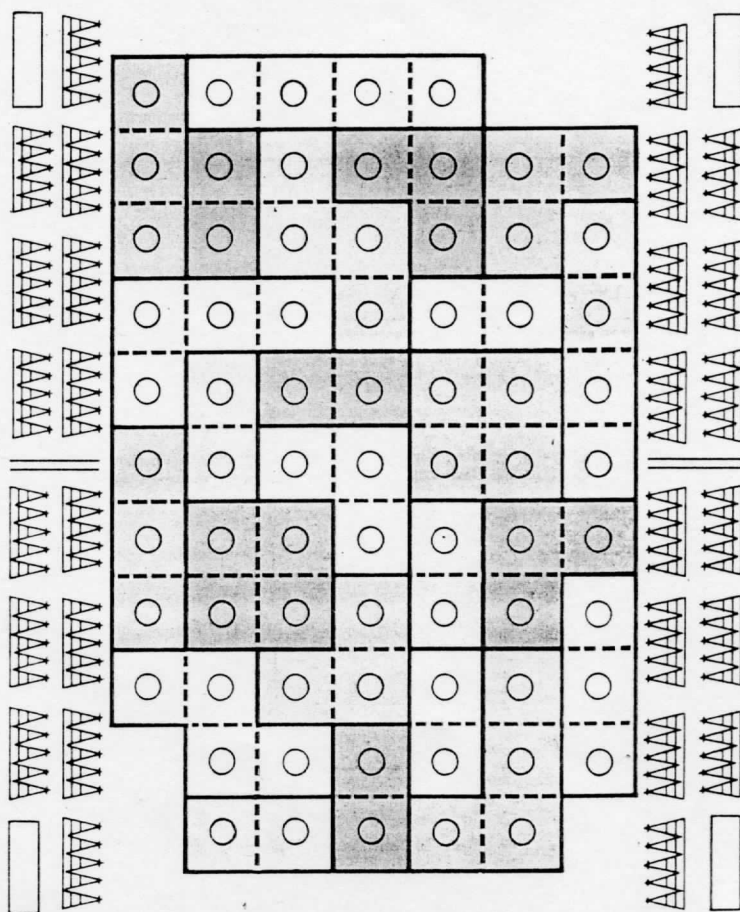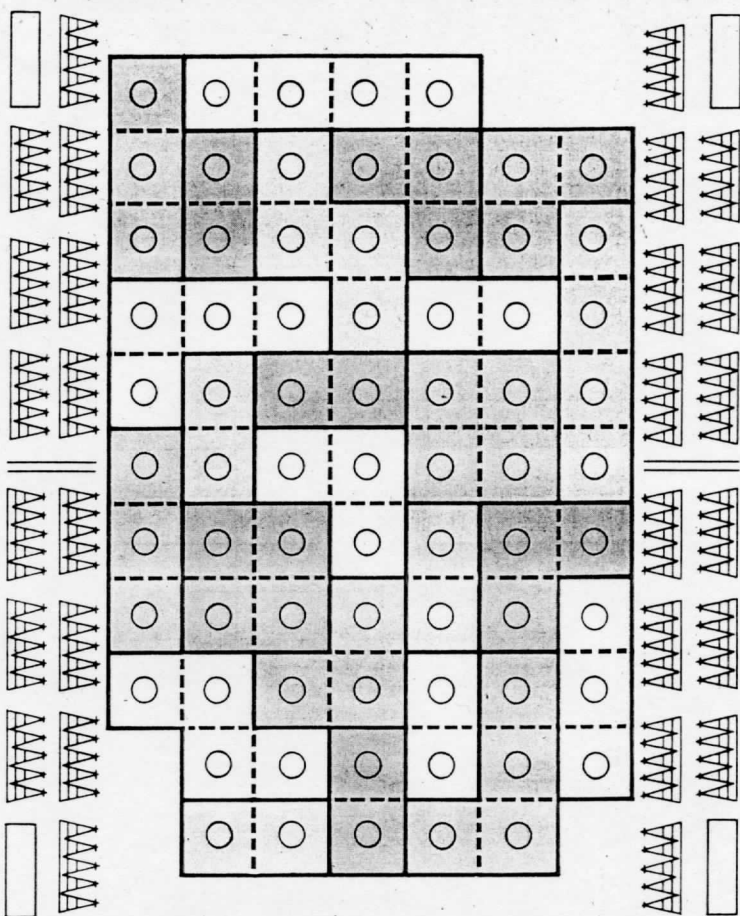
Spy

by Sid Sackson

A paper and pencil game for 2 players.

Equipment: One gamesheet (reproduced on graph paper), consisting of an upper and a lower field, and pencil for each player.

Object: To be the first to deduce the opponent's secret network of lines by systematically "spying" on the opponent's upper field.

Preliminaries: Make two copies of the gamesheet on graph paper, and give one copy to each player. In the upper field of his gamesheet, each player lays out a network (without letting his opponent see it) consisting of six lines—each of a different length, ranging from one to six grid unit lengths, inclusive. The lines must be drawn either horizontally or vertically, must be connected together (in any order), and must turn at right angles at each connection point. The lines may not touch each other except where one ends and another starts. Illustrations 1 and 2 show networks that have been laid out correctly. Illustration 3 shows an incorrectly drawn network.

Play:

1. One player spies by asking the opponent about the contents of a space in the opponent's field (such as 1A, 2B, etc.). If there is a line—or two connecting lines—in that space, the opponent announces "hot." If there is no line in that space but it is adjacent to a space containing a line, the opponent announces "warm." Squares which touch diagonally are not considered adjacent for this purpose. In all other cases, the opponent announces "cold." The opponent then asks about the contents of a space and the first player replies, thereby completing a round.

2. Each player uses the lower field on his gamesheet for keeping track of the information he obtains by spying.

3. In any round a player may, instead of spying on a single space, spy on from two to five connected spaces belonging to a single horizontal or vertical row. Whenever a player makes use of multiple spying, he must cross out below his upper field a square containing a number equal to the number of squares spied upon that turn. A player whose six numbered squares have all been crossed out may no longer use multiple spying, and the opponent should keep track of this by using the squares under his own lower field.

Winning: At the end of any round either or both players may try to reconstruct their opponent's network. A correct reconstruction counts as a single victory for the player. An incorrect reconstruction counts as a double victory for the opponent. (Thus it is possible for a tie to occur or for one player to win as much as a triple victory.) A player who has made an incorrect secret construction or given the opponent incorrect information automatically loses.

Note: If the horizontal two-unit line in Illustration 1 were moved one grid unit to the right and connected with the four-unit line rather than the one-unit line, identical information would be obtained from spying. In such a case, either reconstruction would be considered correct.

Variation: Advanced players may agree to use more lines. Even the addition of an extra one-unit line greatly increases the strategic complexity.
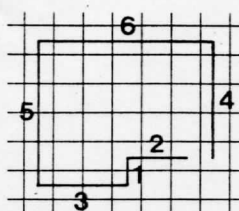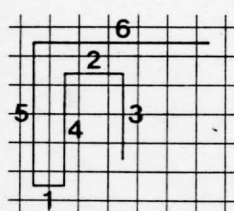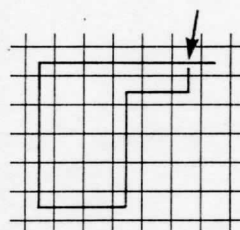
Illustration 1   Illustration 2   Illustration 3

Upper Field

| 5 | 4 | 3 | 3 | 2 | 2 |

Lower Field

| 5 | 4 | 3 | 3 | 2 | 2 |

XandO

by Sid Sackson

A paper and pencil game for two players.

Equipment: A pencil for each player; one gamesheet. (The gamesheet provides grids for a round of two games and an area for recording scores.)

Object: To achieve the highest score through the strategic selection of game squares.

Play: One player is chosen (in any convenient manner) to play "X"; the other plays "O."

Player "X" begins Game #1. For his first turn, "X" blackens in any square he wishes. Player "O" then blackens in a square of his choice. Each player similarly blackens in a single square on his second turn. (At the end of their second turns, the players will have filled in a total of four squares.)

Players then alternate placing Xs and Os in any empty squares they choose—one square per turn—until all of the squares have been taken. Each player on his last turn, may if he wishes, blacken in a square instead of claiming it with his symbol.

Scoring: Players win or lose points depending on the horizontal, vertical, or diagonal rows formed by their adjacent symbols. The scoring is as follows:

For two adjacent squares in a row, score 1 point.

For three squares, lose 5 points.

For four squares, score 10 points.

For five squares, lose 15 points.

For six squares, score 25 points.

The example shows a completed game marked for scoring.

In the sample game, "X" would score 25 points for a row of six squares, 10 points for a row of four, and 7 points for seven rows of two. He loses 5 points for a row of three, and ends up with a net score of 37 points. Player "O" scores 30 points for three rows of four squares, and 10 points for ten rows of two. He loses 10 points for two rows of three, and ends up with 30 points. Incidentally, "O" chose to blacken in a square (the one with different shading) on his last turn.

Example:
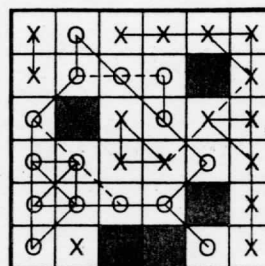
Completing the round: For Game #2, the same four squares blackened in at the beginning of the first game—but not those, if any, blackened in at the end—are filled in on the grid. The second game is then played, with "O" making the first play.

Winning: The player who has the higher total score after both games is the winner.

	Game #1	Game #2	Total
X			
O			

Game #1

Game #2

Closing In

A Strategy Game for Two (with warm-up problems for one)

by Sid Sackson

Equipment
A six-by-six gameboard grid; a pencil for each player.

Object
To make the last move.

Rules of play
1. Player A (chosen in any civilized manner) puts his initial in any square on the gameboard. Player B then initials a square of his choosing.

2. Player A now moves one or more squares in an unobstructed straight line from his last play—horizontally, vertically, or diagonally (the Queen's move in chess). He blacks in the square he exited, and initials the new one. Player B does the same. In moving, a player may neither pass through, nor land on, a square already initialed or blacked in by either player.

3. Players continue to alternate turns as the board is filled and it becomes increasingly difficult to move.

Example
The illustrations below show the first four moves of a game between A and B, with A playing first. (The numbers following the letters show the order of play.) In figure 4, A's next move must be to one of the spaces marked with an "x."

	A1				
		B1			

figure 1

	A1		B2		
		B1			
				A2	

figure 2

A1	B3		B2		
		B1	A3		
			A2		

figure 3

	x	x	x		
x	x	A4	x	x	x
A1	B3	B4	B2		
		B1	A3		
			A2		
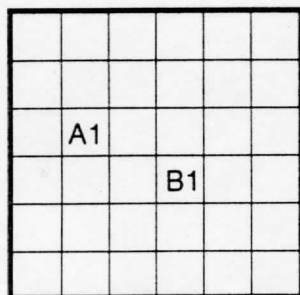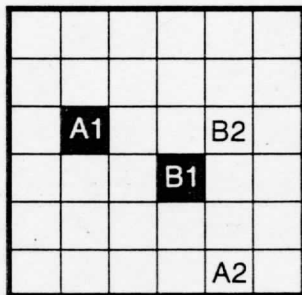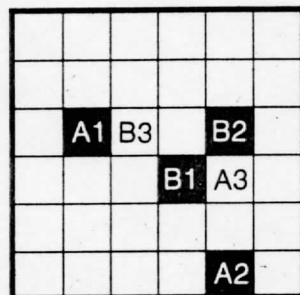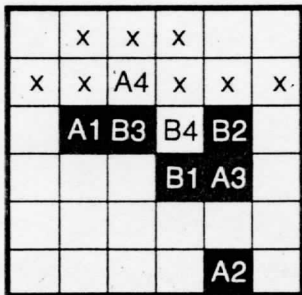
figure 4

Winning
Each player tries to close off his opponent, while leaving himself as much room as possible to maneuver in the endgame. The winner is the last player able to move.

Pre-game Warm-up
While you are waiting for an opponent to materialize, and to get a jump on him when he does, plot your strategy in the sample game problems in the next column. In each case, player A is to move and win.

*Answer Drawer, page 105*

IT'S YOUR MOVE

Problem 1—Left or Right?
You have blocked your opponent, B, into the lower left corner of the gameboard (square 2u). From your position at A10 (square 4x), you have the choice of moving up and to the right (isolating yourself from B), or moving down and to the left (joining B in the corner for a duel). One way will win for you. Which way, and what's the move?

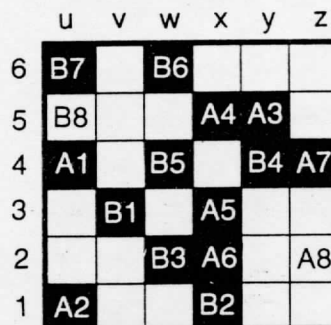|	u	v	w	x	y	z
6			A6		A2	
5			A5	A4		B1
4	A7	A8	A9	A10	A3	
3	B7	B8		B6	A1	
2	B10		B9	B5		
1				B4	B3	B2
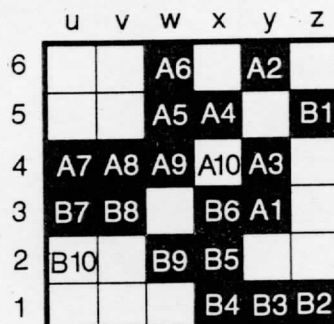
Problem 2—Wise Guy
Your opponent, B (a wise guy), has copied all of your moves—symmetrically by rotation. How can you play from A9 (square 3u) to force a win?

	u	v	w	x	y	z
6	A5			A6		
5		B3	A8	A7		B4
4			A1		A2	B9
3	A9	B2		B1		
2	A4		B7	B8	A3	
1			B6			B5
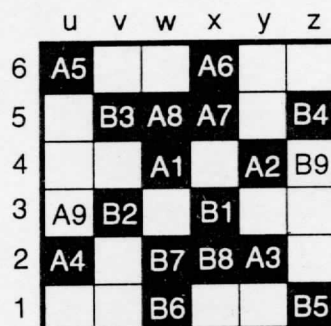
Problem 3—Championship Play
From A8 (square 2z), your next move must lie along the diagonal 3y–6v—that much is clear. But which square? Only one will lead to a win.

	u	v	w	x	y	z
6	B7		B6			
5	B8			A4	A3	
4	A1		B5		B4	A7
3		B1		A5		
2			B3	A6		A8
1	A2			B2		

The First Double-Crostic Ever (Page 42)

A. ATTAR
B. LOTTO
C. FEATHERWEIGHT
D. REVERED
E. ETHEREAL
F. DOWNTOWN
G. LINT
H. OTTOMAN
I. RACHMANINOFF
J. DATE
K. TIDE
L. ESTRANGE
M. NIMROD
N. NAIVE
O. YAHWEH
P. SHADOW
Q. ONE-SIDED
R. NOTEWORTHY
S. UNTOWARD
T. LEVITE
U. YANKEE
V. SHIBBOLETH
W. SQUAWKED
X. EMPHATIC
Y. STANCH

And tho'
We are not now that strength which in old days
Moved earth and heaven; that which we are, we are;
One equal temper of heroic hearts,
Made weak by time and fate, but strong in will
To strive, to seek, to find and not to yield.
—Alfred Lord Tennyson, "Ulysses"

Honeycomb Jigsaw (Page 68)
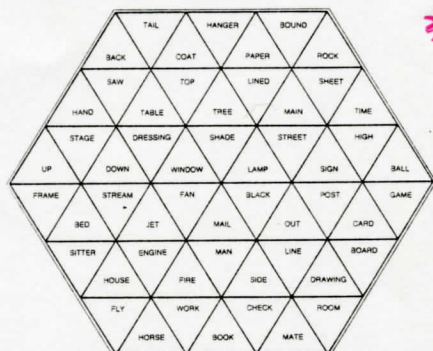
The Price Is Right (Page 29)

Computing Your Score Compare the actual 1929 price of each item against your guess and determine the difference between them. A high guess on one item and a low guess on the next will not cancel each other out—you must add up your total error for all 15 items. Compare this score to the total of the errors made by each of the other three contestants. The contestant with the lowest total error is the winner.

(To determine which individual items you would have won on the show, check the items in which you made the lowest error of the four contestants. Those items are your imaginary prizes.)

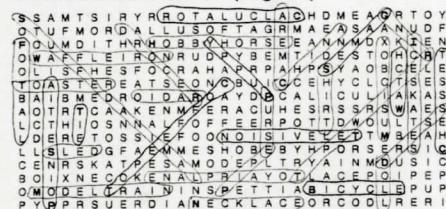| Items	Actual 1929 Price	Louis Fredrick Guess	Louis Fredrick Error	Gloria Rosenthal Guess	Gloria Rosenthal Error	Bella Freedman Guess	Bella Freedman Error
1. Ladies' Oxfords	18.50	30.00	11.50	1.98	16.52	7.50	11.00
2. Piano	$1,425.00	$100.00	$1,325.00	$499.00	$926.00	$1,500.00	$75.00
3. Milk of Magnesia	.25	.75	.50	.09	.16	.25	——
4. Vacuum Cleaner	35.00	35.00	——	42.00	7.00	10.00	25.00
5. Taxi Fare	.30	.25	.05	.10	.20	.25	.05
6. Chocolates	2.00	.50	1.50	.98	1.02	1.00	1.00
7. TAT Ticket	1,407.76	1,000.00	407.76	1,200.00	207.76	600.00	807.76
8. Tomato Soup	.12	.20	.08	.05	.07	.15	.03
9. Plymouth Coupe	685.00	500.00	185.00	900.00	215.00	800.00	115.00
10. ScotTissue	.25	.50	.25	.22	.03	.20	.05
11. Calculator	300.00	150.00	150.00	200.00	100.00	275.00	25.00
12. *The New Yorker*	.15	.25	.10	.25	.10	.15	——
13. Lucky Strikes	.15	.15	——	.15	——	.15	——
14. Pocket Watch	1.50	5.00	3.50	2.98	1.48	2.50	1.00
15. Vitalis	1.00	.50	.50	.09	.91	.50	.50
Total of Errors			$2,085.74		$1,476.25		$1,061.39

Closing In (Page 67)

Problem 1—Left or Right? A11 at 6z; A12 at 5y. You now have four moves remaining, while B has but three. If, to start, you move down instead, B will win.

Problem 2—Wise Guy A10 at 2v; A11 at 4x. B's best move from B9 is the nonsymmetrical response 3y. Even so, he will have at most four moves remaining, while you will have six.

Problem 3—Championship Play A9 at 6v. If B9 at 5v, A10 at 4x and A11 at 3w. If B9 at 4v, A10 at 5w and A11 at 4x. If B9 at 5w, A10 at 4v and A11 at 3w. If B9 at 3w, A10 at 5v and A11 at 5w. In all cases, B can be blocked through further play, or will run out of moves before you. (Notice that other first moves for A fail. If A9 at 3y or 4x, B9 at 3w and B10 at 4v. If A9 at 5w, B9 at 4v and B10 at 3w.)
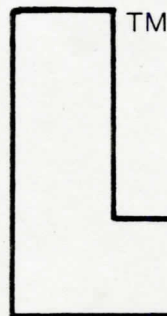
Illustrated Word Search (Page 43)

Last Ditch: A Strategy Game ★☆

by Sid Sackson

How to Play

Number of Players: Two.

Equipment: Two pencils (representing "shovels") for you and your opponent. A pattern of crossing lines ("the ditches") on a sheet of paper.

Object: Be the last player to fill a ditch.

Rules:

1. Prepare the playing "field" by drawing a closed pattern of intersecting lines in any shape you wish. Each line represents a ditch. (The example below shows a field composed of eight ditches.)

2. Your opponent (if you drew the ditches) has first move, and fills any ditch *for its entire length.*

3. You move next and fill any ditch of your choice—also for its full length, unless you meet a ditch already filled, in which case you must stop at the point of junction. (In the example below, which shows the first seven turns of a game, ditches 3, 5, and 6 are filled to the points at which they meet ditches 2, 2, and 3 respectively.)

4. Play proceeds in this fashion and continues to alternate between you and your opponent.

Winning: Whoever fills the last ditch wins the game.

Example: Exactly seven moves remain in the field below, no matter what the order in which the ditches are filled. (Note: Between them, ditches a and b consume three turns, because filling one of them breaks the other into two parts.)
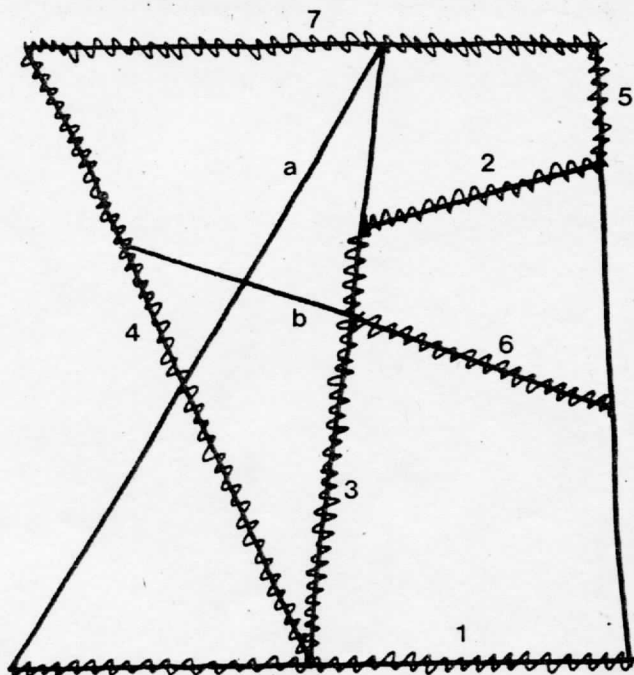

Warmup Puzzles

1. Ground Tactics. Test your strategy. It's your turn in this game, and you have a choice of five ditches to fill—one of the three crossing in the middle, or one of the two on the lower edge. How should you play?
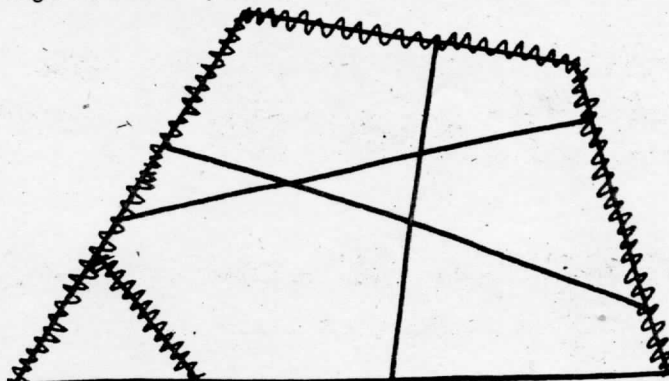
2. At the Root of the Problem. It's your turn again and the game looks rather difficult to analyze. Look closer: The options can be quickly narrowed down. What is your winning play?
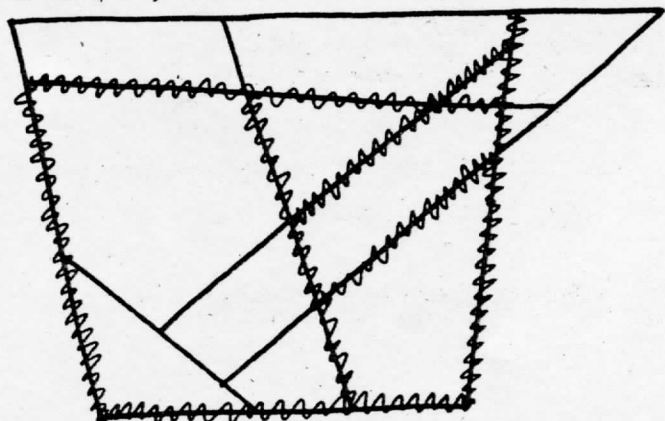
3. Trench Warfare. Your opponent has just drawn this pattern of ditches and we're not serious that there's one winning play, are we? Well, yes, we are. Filling which ditch guarantees you a win?
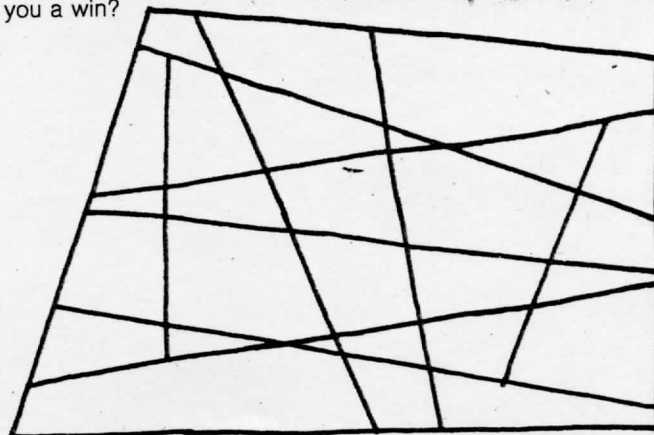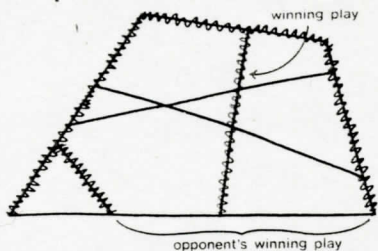
✱ ㉘ Last Ditch

**1. Ground Tactics.** Fill the ditch shown in red and eight plays will remain—the last one yours. If you fill (or allow your opponent to fill) the ditch shown with a bracket, you will lose.
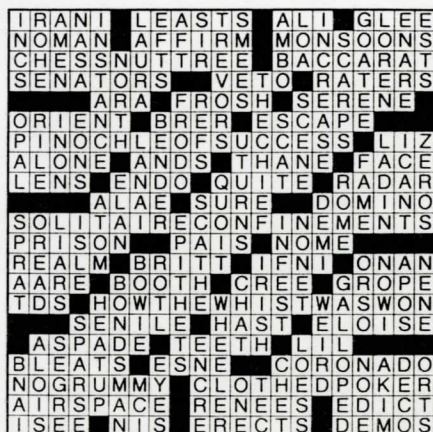

winning play

opponent's winning play

2. At the Root of the Problem. Fill the ditch shown in red and then follow this strategy: Whatever ditch your opponent fills, fill the identically lettered one that remains. The last play, of course, is yours.

winning play
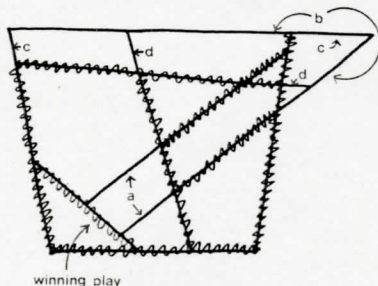
3. Trench Warfare. This is really the easiest puzzle of the three. Fill the ditch that runs across the middle, dividing the playing field into two equivalent parts. Then no matter what ditch your opponent fills on one side, you fill the one symmetrically situated on the other side. If your opponent, for example, plays at one of the bracketed lines marked "a," you should play at the other. The last turn will be yours. (And when you set up a playing field, be careful that you don't let this happen to you.)

winning play
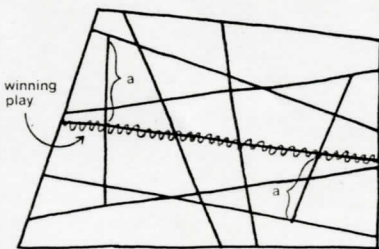
�37 Gamesmanship

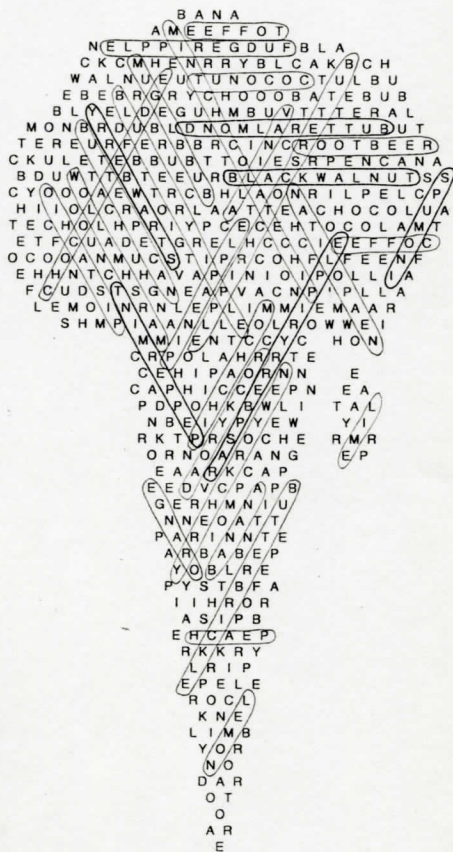## ㉖ Assembly Line Blues

The defective items are as follows:
1. Fourth and sixth
2. First
3. Second, fourth, and fifth
4. None
5. Third
6. Fifth
7. Second and seventh
8. Fourth
9. First
10. Second, third, and sixth
11. Seventh
12. Sixth
13. None
14. Third and fifth
15. Second and sixth
16. Fourth
17. First, second, and seventh

Score 1 point for each defect you spotted, and subtract 1 point for each good item you thought was defective.

Performance Ratings:
- 25: Employee of the Month award
- 21–24: Incentive bonus is scheduled
- 18–20: You met your quota
- 15–17: First warning from management
- 11–14: Ralph Nader is investigating complaints
- 7–10: No more liquid lunches at Harry's Bar
- 1–6: Congratulations, you've been replaced by a machine

�38 31 Flavors

㊹ Pictionary

1. Hourglass
2. Sombrero
3. Basilica
4. Kidney
5. Decanter
6. Griffin
7. Oboe
8. Clipper
9. Festoon
10. Venus's-flytrap
11. Piranha
12. Wolverine

㊴ Cryptic Warmup Puzzle

ACROSS

1 LEVER. *Reversal* clue. LEVER ("a bar") is REVEL ("to make merry") spelled backwards. The words "when returning" indicate the reversal.

4 ALLOY. *Anagram* clue. The word LOYAL anagrammed (presented "unusually") makes ALLOY ("brass, for example").

5 TITAN. *Container* clue. IT inside ("held by") TAN ("a light brown") makes TITAN ("giant").

DOWN

1 LEAST. *Homophone* clue. LEAST ("that which is smallest") sounds the same as LEASED ("rented"). The homophone is indicated by the words "we hear."

2 VALET. *Charade* clue. VALET ("servant") is VA (the abbreviation for Virginia) plus LET ("gave permission").

3 RAYON. *Concealed word* clue. RAYON ("fabric") is concealed in "gRAY ONly." The concealment is indicated by the words "available in."

㊴ Cryptic Crossword

ACROSS

1 Tuba (abut)
3 Ego booster (bores, e.g., too)
10 Morocco (m + rococo)
11 Animate (an + I + mate)
12 *Kramer vs. Kramer* (remark + s.v. + remark)
14 Eldest (cruEL DESTiny)
16 Hitherto (hit + her + to)
19 Ellipsis (lies slip)
20 Asleep (as + peel)
22 Air conditioner (doctrinaire no I)
26 Mancini (mini + can)
27 Asserts (a + stress)
28 Sneak thief (thinks a fee)
29 Rein (rain)

DOWN

1 Timekeeper (Peter Ike me)
2 Burma (a.m. + rub; reference is to Burma Shave)
4 Groove (go over)
5 Black tie (black + Thai)
6 Ouija (oui + ja)
7 To a degree (toad + e.g. + reef − f)
8 Reed (deer)
9 Screws up (two meanings)
13 Comparison (come − e + Paris + on)
15 Dalliance (d + alliance)
17 Hastiest (hat + sties)
18 Fiendish (finished)
21 Pirate (p + irate)
23 Crick (two meanings)
24 Norse (Nero's)
25 Xmas (Sam + X)

㊵ Double Cross

A. CIAO	N. LITIGATION
B. HOODS	O. INVOLUNTARY
C. RADIOS	P. NARCISSISM
D. INCONSISTENT	Q. APHRODITE
E. STIGMATISM	R. DIGNIFIED
F. HOSEA	S. AMALGAMATE
G. OPPORTUNISTIC	T. YUGOSLAVIA
H. BLAMELESS	U. SENSATIONAL
I. STOAT	V. WHOLESOME
J. OFFENDING	W. OCCUPATION
K. NOTORIETY	X. RODEO
L. APPEARANCE	Y. KINGFISHER
M. LYCANTHROPE	

A Dallas physician has a big, tasteful arrangement of imitation greenery in his waiting room. Only on close inspection does an admiring patient discover that the plastic foliage simulates poison ivy, poison sumac, and poison oak. The doctor is, of course, a dermatologist.
—Chris Hobson, *All in a Day's Work* (from *Reader's Digest*)

Wtht Vwls ★★

by Sid Sackson

Each group of consonants below represents a common word without its vowels. In fact, each set of consonants corresponds to several such words. Your goal is to find the longest one for each cluster. Add the vowels A, E, I, O, U, and Y (the letter Y *always* counts as a vowel in this game) wherever and as often as you like to form the longest possible words. In forming a word, the order of the consonants may not be changed, nor may other consonants be added. Proper names, hyphenated words, and foreign words are not allowed. Score 1 point per letter for each of your 15 answers (no score for any combination for which you

cannot find a valid word).

Example: Given the consonants GRL, the answer GIRL would score 4 points, and GRUEL would score 5, but EAGERLY would have the highest score with 7 points. The answer GLARE would not count, because it changes the order of the consonants, nor would GRILL, because it has an extra L.

Par Score: 80

Expert's Score: 110

Our list of words, with a total score of 125 points, appears on page 68.

If you would like to play "Wtht Vwls" with your friends, you'll find full rules for competition at right.

1. STRT _____

2. PRDC _____

3. PRN _____

4. VLT _____

5. PCS _____

6. BTS _____

7. TML _____

8. CHS _____

9. LLT _____

10. CHT _____

11. THNS _____

12. RFLD _____

13. RTR _____

14. MNNS _____

15. SPCS _____

Game

Game Rules

"Wtht Vwls" makes an excellent game for two or more players. Make sure before starting that you have a fair supply of paper on hand, cut into slips measuring approximately 1 x 3 inches, as well as a dictionary to be your authority for words (paperback or desk-size is recommended). Playing time is about 10 minutes.

Object To outscore your opponents by forming the longest words using given sets of consonants.

To Start Each player thinks of a word containing at least three consonants and writes the *consonants only*, in proper order and unspaced, on as many slips of paper as there are players. He then gives one slip face down to each opponent, keeping one for himself.

Play When each player has a set of consonants from all opponents, the players turn over the slips of paper and try to form the longest word for each by adding vowels to the consonants. Vowels may be added in any positions—before, after, or between the consonants—but the order of consonants may not be changed. The letter Y always counts as a vowel. Each player writes the words he forms on the corresponding slips, including his word for his own set of consonants.

When one player has found words for all of his slips, he calls "Time." All players must stop. (A player in the midst of writing a word when "Time" is called may finish it.) If no player is able to find words for all of his slips, "Time" may be called by agreement of a majority of players.

Scoring The score for each acceptable word formed is the number of letters—both vowels and consonants—it contains. No proper names, hyphenated words, or foreign words may be used. Any challenged word should be checked in the dictionary.

Winning The player with the highest score at the end of five rounds—or any other number previously agreed upon—is the winner.

# ANSWER DRAWER

Illustration by Brad Hamann

⑩ Gamebits

King Kong Chess
Réti's (White's) next move was Bg5–d8 mate. Note that if Black had played Kd8–e8 on his previous move, White would have played Rd1–d8 mate.

㉜ Cryptoquips

1. I don't want to achieve immortality through my work. I want to achieve it through not dying. (Woody Allen)

2. A man occupied with public or other important business cannot, and need not, attend to spelling. (Napoleon Bonaparte)

3. You know you've reached middle age when your weightlifting consists merely of standing up. (Bob Hope)

4. The answer to this cipher will appear in the July/August issue (April Fools' Joker).

5. I'm a marvelous housekeeper. Every time I leave a man, I keep his house. (Zsa Zsa Gabor)

6. The best minds are not in government. If any were, business would hire them away. (Ronald Reagan)

7. After the fight is over and Frazier don't answer the bell, I'm gonna jump over the ropes and I'm gonna whup Howard Cosell. (Muhammad Ali)

㉚ Erin Go Bragh
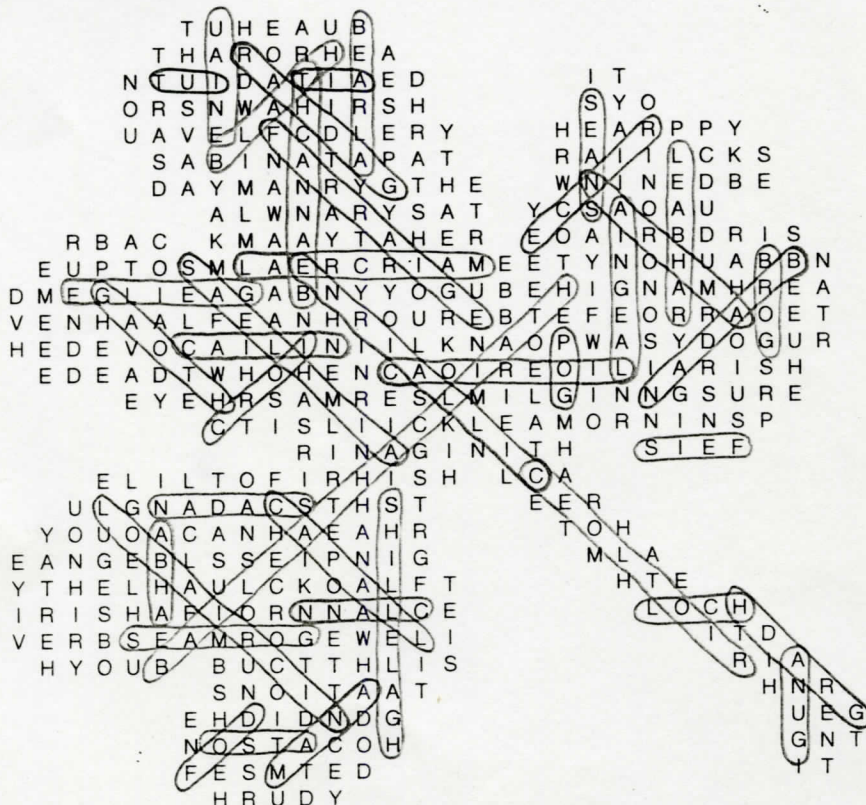
㉞ Without Vowels

Words	Points
1. Saturate	8
2. Periodic	8
3. Paranoia	8
4. Evaluate	8
5. Eyepieces	9
6. Beauteous	9
7. Oatmeal	7
8. Icehouse	8
9. Loyalty or Ululate	7
10. Château	7
11. Euthanasia	10
12. Airfield	8
13. Oratorio	8
14. Mayonnaise	10
15. Auspicious	10
Total Score	**125**

㊻ Can It!

1. Tennis balls
2. Ham
3. House paint
4. Hershey's Cocoa
5. Lubricating oil
6. Coffee
7. Tomato paste
8. Sardines
9. Pepper or other spice
10. Sucrets cough drops
11. Shoe polish
12. Band-Aids

㊷ Double Cross

A. HAYMOW
B. LETT
C. MATCHLESS
D. ENCYCLOPEDIST
E. NEEDLEPOINT
F. CHATTELS
G. KETTLE OF FISH
H. EYEGLASS
I. NOURISHMENT
J. MANANA
K. INTUITIVELY
L. NEIGHBORHOOD
M. OYSTER BEDS
N. RATCHET
O. INTESTATE
P. TWIDDLED
Q. YUGOSLAVIA
R. RIGHT-WING
S. ENCROACHING
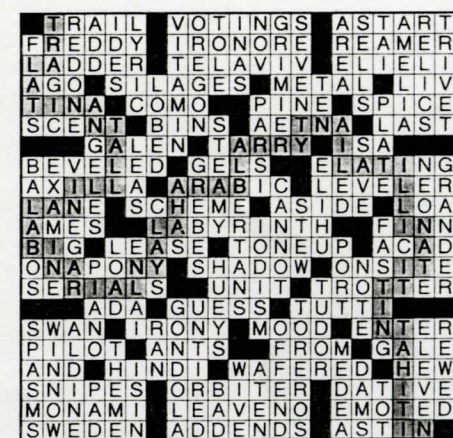T. PHOTOSTAT
U. OVERTHROW
V. ROYAL
W. THINNISH

The psychologists and metaphysicians wrangle endlessly over the nature of the thinking process in man. But no matter how violently they disagree otherwise, they all agree that it has little to do with logic and is not much conditioned by overt facts.—H.L. Mencken, *Minority Report*

㉕ Espygrams

1. aspired, praised, despair, diapers
2. garden, danger, gander
3. rites, tiers, tries, tires, I rest
4. sober, robes, bores
5. parleys, sparely, parsley, players
6. cosmic, comics
7. peals, pleas, sepal, leaps, pales
8. leasers, sealers, earless, resales, are less
9. madden, men add, damned, demand
10. quainter, antiquer
11. sad feet, defeats, feasted, feted as, feeds at
12. canter, trance, nectar, recant
13. Remasting, mastering, emigrants, streaming
14. vaster, averts, ravest, starve

㊴ Amazement

The red line shows the path from 1-Across to 126-Across using only the letters of LABYRINTH (69-Across). Note: This is not the Hidden Contest. Keep looking.

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

Odd & Even

TWO GAMES, A PUZZLE, AND A CHALLENGE BY SID SACKSON

The Games ★

Players Two

Equipment Thirty-six pieces (coins or other markers), and the board shown.
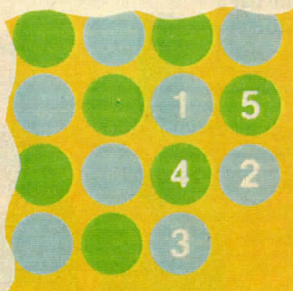
Rules for "Odd"

The first player, chosen randomly, places a piece on any one of the 36 circular spaces on the board. The second player then places a piece on any space that is adjacent to the first piece in any direction (horizontally, vertically, or diagonally). Thereafter, each player in turn places a piece on an empty space that satisfies *both* these conditions:

1. It must be adjacent to the last piece placed by the opponent.

2. It must be adjacent to an *odd* number of previously placed pieces (either 1, 3, 5, or 7 pieces, but not 2, 4, 6, or 8).

The first player unable to place a piece according to these rules loses.

Example: In the following diagram, the first move of the game is indicated with a "1," and the second move with a "2," and so on. The player placing the fifth piece has won, since both open spaces next to that piece are adjacent to an even number of pieces.

Rules for "Even"

The game of Even is played the same way as Odd, except that each move must be placed adjacent both to the last piece played and to an *even* number of other pieces. The "even" restriction does not apply until the third move of the game; otherwise the first player would always win at once!

Suggestion In playing Odd or Even, it's a good idea to mark the last piece played. If you are using pennies for pieces, you might place a dime on top of the last piece played and move the dime after each turn.

Solitaire Puzzle ★★

Using the rules of Odd, can you fill in all 36 board spaces without making an illegal move? *Hint:* The choice of your first move is important. *Answer Drawer, page 69*

An Unsolved Challenge ★★★

Although we were able to fill in all 36 board squares playing solitaire using the rules of Odd, we couldn't find a way to leave fewer than four spaces empty when we played solitaire using the rules of Even. Since this intrigued us, we'll send a *Games* T-shirt to the first 10 readers who send us a perfect 36-move solution for Even solitaire. Mail solutions to Even solitaire, c/o *Games*. If we don't receive a perfect solution by 11/10/82, we'll send a T-shirt to the person who was first to submit the highest score as of that date.

ANSWER TO PREVIOUS PAGE'S PUZZLE

51 Cryptotiles

1.

S	P	A	T	S
C	U	B	I	C
A	R	O	M	A
N	E	V	E	R
S	E	E	D	Y

5.

M	A	R	S	H
I	R	A	T	E
L	E	V	E	R
K	N	E	A	D
Y	A	N	K	S

2.

C	O	M	E	T
O	P	E	R	A
W	I	S	E	R
E	N	A	C	T
R	E	S	T	S

6.

S	L	A	T	S
T	U	L	I	P
U	N	I	T	E
F	A	B	L	E
F	R	I	E	D

3.

S	A	L	A	D
E	L	O	P	E
D	I	V	A	N
A	V	E	R	T
N	E	S	T	S

7.

S	A	T	E	S
T	R	I	A	L
O	R	A	T	E
P	O	R	E	D
S	W	A	N	S

4.

A	G	L	O	W
B	R	A	V	O
B	O	X	E	R
O	P	E	N	S
T	E	R	S	E

8.

S	T	A	F	F
C	O	L	O	R
A	T	O	N	E
R	A	N	T	S
F	L	E	S	H

45 Odds and Ends

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

56 Games & Books

Toads-and-Frogs

Left (the player with the Toads) should win, regardless of who moves first. If Left moves first, he must move a Toad on either the top, second, or bottom row; if instead he begins by jumping a Frog, he will lose. On subsequent turns, he should avoid jumping unless forced to do so. To be fully convinced of this answer, you may need to learn from the book how to calculate the value of the position in each row, as well as the value each row would have if either player moved first in it. Then the task is reduced to choosing the move that results in the most favorable, or least unfavorable, change in value to each player's side.

43 Digititis

```
                    9 0 9 9 0 8 0 9
        12 ) 1 0 9 1 8 8 9 7 0 8
             1 0 8
                 1 1 8
                 1 0 8
                     1 0 8
                     1 0 8
                     1 0 8
                         9 7
                         9 6
                             1 0 8
                             1 0 8
                                 0
```

53 Odd & Even

A perfect solution to Odd solitaire is shown. We have yet to find a solution that begins in a different corner.

40 Think Under Pressure?

1. The letter X should be crossed out in the first sentence.
2. The word "gaiety" should be circled.
3. The stack contains 25 cubes.
4. The square should be left empty.
5. The blank should contain your correct age.
6. 10¢, 10¢, 5¢, 1¢.
7. The space should contain the word DOG.
8. The next space should be empty.
9. The next space should contain the word NO.
10. The word GOLF should appear in the next space.
11. The next blank should be empty.
12. True.
13. Thursday.
14. MADAM, MEDIUM, MOM, MUM, MUSEUM. Many other answers are possible.
15. Uncle.
16. The square should contain a check.
17. 2:36.
18. The word ICE should be written at the bottom of the page.
19. Eleven.
20. The words I QUIT should appear at the end of the sentence.

Scoring: Count 1 point for each correct answer. The maximum score is 20 points.

Ratings: 20 points—Ace. You work exceptionally well in situations requiring rapid and tricky brainwork. Unfortunately, this skill has no positive correlation with income. 18-19 points—Excellent, indeed. You maintain a cool head and sharp wits when others are losing theirs. 16-17 points—Very good. You can fill out an IRS 1040 on time without the help of H & R Block. 14-15 points—Good. You can slip tab A into slot A. 10-13 points—Fair. But sometimes you are confused by tricky instructions and sometimes even by not so tricky instructions. Under 10 points—Try another quiz.

Loop-the-Loops ★☆

by Sid Sackson

A New Pencil-and-Paper Strategy Game for Two Players

Here is a brand new pencil game that is as elegantly simple as "Dots," "Battleships," and other old favorites. Find a friend to play it with, or enjoy the game solitaire using the puzzles at right.

Setting Up
On a piece of paper one player draws five loops that intersect each other as often as the player desires. (The example game and the three puzzles at right illustrate only a few of the nearly endless number of possible arrangements.)

The Play
The first player (chosen in any reasonable—or unreasonable—manner) starts at any intersection he chooses and draws a heavy, continuous black line along the loops past two intersections and ending at a third. At each intersection, he can continue on the same loop or switch to another. The second player starts his turn at the intersection reached by the first player, continues the line along the loops through two more intersections, and ends at a third. Players alternately continue the line in a similar fashion. No portion of a loop may ever be traced twice. (See the example starting game at right.)

Impasse
When the line reaches an intersection from which it can't continue, the player's turn ends even if he has not yet reached his third intersection. The other player may then begin at any free intersection he wishes.

Scoring
Each time a player completes a loop, he scores one point.

Winning
When all the loops have been completed, the high score wins. Three games constitute a match.
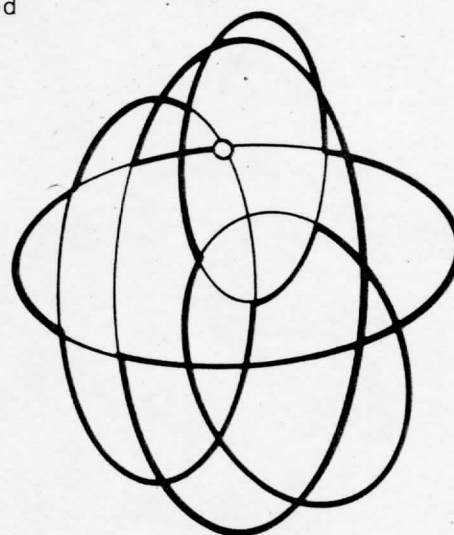
Variations
Loop-the-Loops can be made simpler or more complex by varying the number of loops in a game. If an even number of loops is used, the last one completed should score 2 points to avoid the possibility of a tie game.

Example The first two moves of players A and B (starting at the arrow) are indicated by letters and darker lines. Player A can now proceed in any of three directions from the circled intersection.


1. Easy Puzzle Your opponent has completed the small loop and leads 1-0. It's your move, from the circled intersection. What's the winning play?

2. Medium Puzzle It's your move from the circled intersection. Only one play will guarantee you a win. What is it?
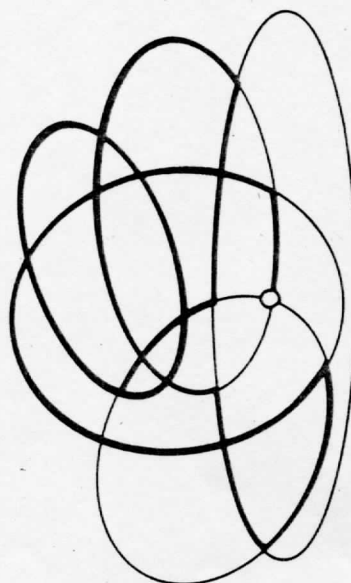
3. Hard Puzzle Your opponent's last turn was blocked, so you can start your move at any intersection you choose. It should be easy to win. But with the right play, you can get all five loops for yourself. What's the next move for a shutout?
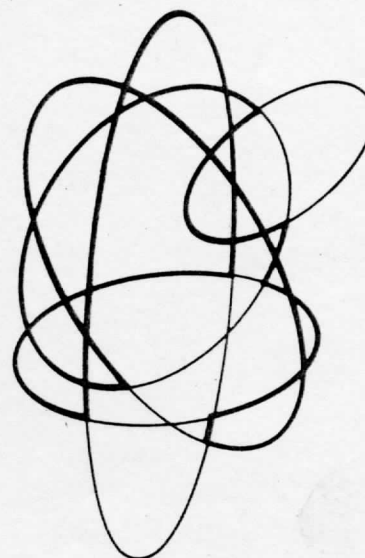
ANSWER DRAWER

59 Cryptic Warm-Up Puzzle

ACROSS

1. BEAR. The word BEAR (defined as "grizzly") is the word BEARD with the final letter dropped, or "trimmed."

5. TRIBUNE. The word TRIBUNE ("newspaper") is the result of inserting the word RIB ("joke") inside the word TUNE ("song").

6. ABANDON. The answer ABANDON ("leave," as a verb) is a combination of A, BAND ("jazz group"), and ON.

7. REED. The answer REED ("some grass") is a reversal of DEER ("Bambi, e.g."). The word "returned" indicates that the phrase before it is to be turned around.

DOWN

1. BATMAN. The answer BATMAN ("superhero") is an anagram of the word BANTAM. The word "clobbered" suggests the jumbling of letters.

2. ANIMAL. The answer, defined as "beast," is hidden in the phrase "JapAN I'M A Little." The word "in" suggests the concealment.

3. SUNDAE. The word SUNDAE ("ice cream dish") sounds the same as SUNDAY ("the Sabbath"). The phrase "you say?" indicates that the adjacent word, SUNDAY, is to be spoken to get the answer.

4. PENNED. The word PENNED in two different senses means "wrote" and "in a sty."

33 Mental Blocks

1. STEWS, SEETHE, ESTEEM, DESSERT, RESTLESS, BESTSELLER, SEAMSTRESS
2. CEASE, CANCEL, ACCEDE, ELEGANCE, ACADEMIC, PIECEMEAL, ACCELERATE
3. BLOOM, LOBBY, OBLONG, BALLOON, HOBGOBLIN, BOMBSHELL, BOONDOOGLE
4. TENSE, DENOTE, KITTEN, DETENTE, TENEMENT, INNOCENT, NINETEENTH

38 Dszquphsbnt!

1. CRYPTOON. "They plan to make it an annual event. They're going to throw a tremendous party, and we are all invited."

2. IGNORANCE IS BLISS? The less people know about how sausages and laws are made, the better they will sleep at night.—Bismarck.

3. SUPERSTITION. Beating of drums to ward off evil spirits is out of vogue. Not so the blowing of horns to untangle traffic jams.

4. MUSIC LESSON. Motto sighted on an office wall: Never try to teach a pig to sing; it wastes your time and it annoys the pig.

5. LEGAL MAXIM. As any competent lawyer will cheerfully explain, a fine is a tax for being bad and a tax is a fine for being good.

6. SHOW BIZ QUIZ. *Quest for Fire* producers, attempting to increase attendance, consider renaming it *Raiders of the Lost Spark*.

7. THINKING AHEAD. De Horst anticipated much of Descartes' philosophy, but most modern scholars tend to put Descartes before De Horst.
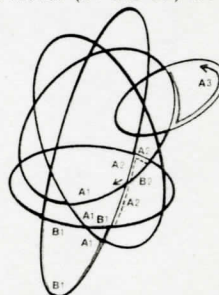
58 Loop-the-Loops

1. Easy Puzzle The move in red forces the opponent's next play, giving him a second loop, but leaving the final triangle—completing three loops—for you. You win 3-2.
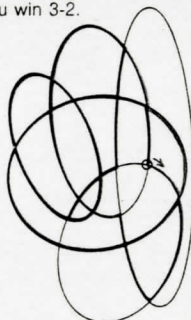
2. Medium Puzzle Your winning move is shown in red. Any other play will eventually give your opponent first choice in that isolated rectangle (dotted lines)—and the game. When all lines except that rectangle and the central triangle have been taken, make the move indicated by the dotted line. Not only will this ensure you the win, you'll get all five loops! You win 5-0.
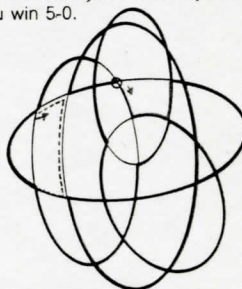
3. Hard Puzzle The best first move (A1) is shown in red; the second (A2) in dashed red; the third (A3) indicated by the arrow in the upper right. Your opponent's moves (B1 and B2) are forced. You win 5-0.

72 Verbal Illusions

1. Bedrug
2. Assess
3. Sealing
4. Minimum
5. Mistress
6. Pumpkin
7. Coup
8. Automate
9. Legend
10. Deliver
11. Beer
12. Postman
13. Pleasure
14. Poland (Italy is the land of the Po River)
15. Husbandry
16. Belly
17. Garbage
18. Flattery
19. Vaseline
20. Supervisor
21. Gorgeous
22. Hashish
23. Cupola
24. Apply

66 Animal Instincts

1. Ling-Ling and Hsing-Hsing
2. Buffalo
3. Fozzie, bear
4. Ham
5. Him and Her
6. *Planet of the Apes, Beneath the Planet of the Apes, Escape from the Planet of the Apes, Conquest of the Planet of the Apes, Battle for the Planet of the Apes*
7. *Harvey*
8. The Green Monster is the nickname for Fenway Park's green left field fence.
9. Old Joe
10. "Three Blind Mice"
11. a. 3 (bird, nestling)
    b. 4 (frog, tadpole)
    c. 5 (swan, cygnet)
    d. 2 (kangaroo, joey)
    e. 1 (turkey, poult)
12. Augustus P. Mutt
13. Alamein, white
14. Wilbur, Templeton
15. Centaur: half man, half horse
    Harpy: head of a woman, wings and claws of a bird
    Minotaur: body of a man, head of a bull
16. To the right of the pyramid on a one-dollar bill
17. a. 3 (Daisy, Dagwood)
    b. 4 (Mr. Ed, Wilbur Post)
    c. 5 (Flipper, Sandy and Bud Ricks)
    d. 6 (Fred, Tony Baretta)
    e. 2 (Tramp, the Douglas family)
    f. 1 (Lassie, Timmy)
18. Flicka (*My Friend Flicka*), Goose Bar Ranch
19. Morris the Cat
20. "Bear cave" in CB talk means police station.
21. 1313 Mockingbird Lane
22. a. "The Lion Sleeps Tonight"
    b. "Ain't Nothing But a Hound Dog"
    c. "Disco Duck"
    d. "Tie Me Kangaroo Down"
    e. "Crocodile Rock"
    f. "Rock Lobster"
    g. "I Am The Walrus"
    h. "Puff the Magic Dragon"
    i. "Bird Dog"
23. French poodle, blue
24. Yosemite Sam
25. Winnie the Pooh, Christopher Robin
26. Tige, in a shoe with Buster
27. Checkers, cocker spaniel, Richard Nixon
28. Ted Giannoulas
29. Atlanta Falcons, Baltimore Colts; Chicago Bears; Denver Broncos; Miami Dolphins; Detroit Lions; Los Angeles Rams; Philadelphia Eagles; St. Louis Cardinals; Seattle Seahawks
30. Patty Cake is the first gorilla born in New York City's Central Park Zoo.

Photo credits for Renee Klein collage (from left to right): *Planet of the Apes*, Culver Pictures, Inc.; Ham, Wide World; Ted Giannoulas, The Chicken, Inc.; Yosemite Sam and Bugs Bunny, Warner Brothers, Inc.; Flipper, Bettmann Archive; L.B.J. and beagles, UPI; Lassie, UPI; Buster Brown and Tige, Brown Shoe Company; Camel, R.J. Reynolds Company; *My Three Sons*, Viacom International, Inc.; Morris the Cat, Star-Kist Foods, Inc.; Mr. Ed, Filmways, Inc.

Fake Advertisement

The Fake Advertisement announced in the Table of Contents was for the Molly Pitcher Military Academy and appeared on page 10.

Score Five ★★

<div align="right">by Sid Sackson</div>

A New Pencil-and-Paper Strategy Game for Two Players

All you need to play are a sheet of paper, two pencils, and at least one player who can add. The game is played on a 6 x 6 grid like the one at bottom right (which you can use for your first game). After reading the rules below, warm up with the puzzle at right to get acquainted with the strategy.

The Setup One player randomly fills in the squares of a 6 x 6 grid with the numbers 1 to 9, using each number four times. Earned scores are tallied in two columns on one side of the grid, and a running total is kept on the other side, as explained below.

The Play Determine the first player by flipping a coin *after* the grid is set up.

The first player chooses one of the four corner squares and circles the number in it. This number starts the running total. The second player chooses a square next to the corner—horizontally, vertically, or diagonally—and circles the number in it. This number is added to the running total. Each player in turn circles an unused number next to the last one circled. If there is no unused number next to the last one circled, the player may choose any unused number in the grid.

Scoring Each time a player circles a number that brings the running total to a multiple of five (ending in either 5 or 0), he writes that total in his scoring column, adding each new score to his previous total. The game ends when the running total (not a player's score) reaches or passes 170. (As a check, the remaining unused numbers should bring the total to 180.)

Example

The first nine plays of a game are shown in the example above. There was no unused number next to the 9, so player A has chosen the circled 7. The column to the right is the running total, with scoring totals circled.

Winning The winner is the player with the highest score when the running total reaches or passes 170.

Puzzle ★★ Your opponent leads by a 5-point margin, and the game is entering the home stretch. It's your move from the 4 in the dotted-circle. The right sequence of moves will win the game, but a wrong first choice will almost certainly lead to defeat. What's your move?

<div align="right">*Answer Drawer, page 68*</div>

Opening Game We've drawn the grid and filled in the numbers for you. All you need to start play is an opponent.

Breakaway

<div style="text-align: right">by Sid Sackson</div>

A New Strategy Game for Two Players

Equipment Two contrasting sets of seven pieces each (pennies and dimes work well), and the board shown.

**Object** To separate all your pieces, so that no two are adjacent.

Setup One player, chosen at random, places all 14 pieces on the board, on any 14 different spaces (circles). When the placement is complete, the other player chooses which set he will use and also whether to play first or second.

Play Each player in turn moves one of his pieces in a straight line, either horizontally, vertically, or diagonally. Pieces may only be moved onto vacant spaces, and may never jump over other pieces.

Pieces must move a specific distance, which changes every turn. On the first move of the game, the first player must move a piece one space only. The second player then moves a piece exactly two spaces. Next, the first player moves a piece three spaces. After that, the second player moves a piece one space, then the first player moves two spaces, the second player three spaces, and so on (the cycle 1-2-3-1-2-3 is repeated indefinitely).

A player must move if a legal move is available. If not, the player loses his turn. A lost turn counts as part of the movement cycle; thus if a player cannot move when it is his turn to move three spaces (as happens frequently), the next player must then move a piece just a single space. A player wins as soon as no two of his pieces are on adjacent spaces (connected by a line).
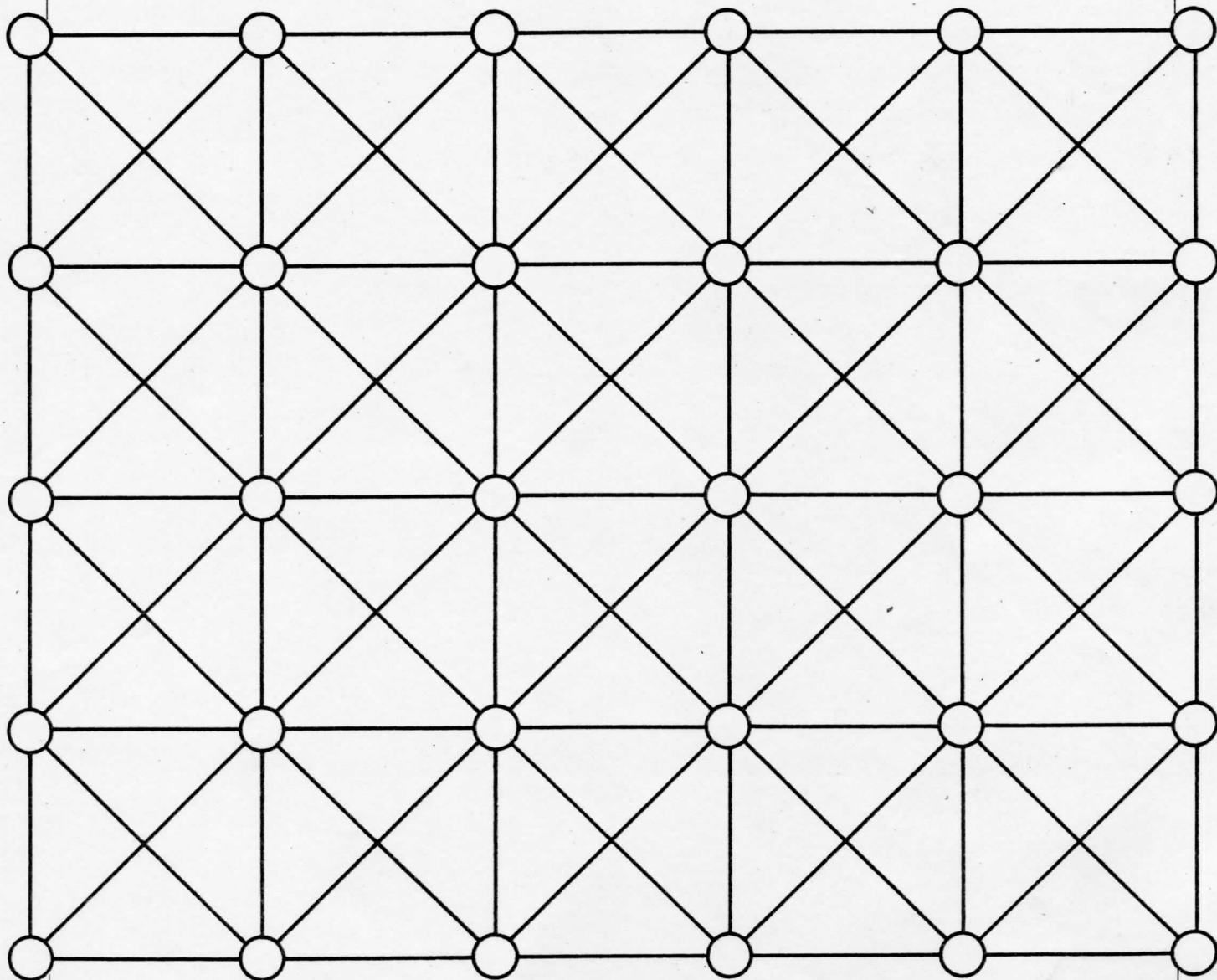
Open Whist

You may not think so, but people did manage to enjoy life before bridge was invented. That's because there was whist, a much simpler game to learn but nonetheless a challenging game of strategy for four players. Now there's Open Whist, a modern variation that two, three, or four players can enjoy.

The rules of standard whist, on which the rules of Open Whist are based, are very simple. Four players use a standard 52-card deck. The dealer passes out all the cards, one at a time, starting with the player at his left. The last card is dealt face up to set the trump (the high suit) for the hand and then is picked up by the dealer with the rest of his cards. The player at the dealer's left opens by playing any card to the center of the table. Play continues in a clockwise direction. Each player must play a card of the suit led; if he cannot, he may play a trump or any other card. The four played cards constitute a trick. A trick is won by the highest card of the suit led; except that if a trump is played by one or more players, the trick is won by the highest trump card. The player who wins a trick plays the first card of the next trick, which may be any card in his hand. Each two facing players are partners and count their tricks together. One point is earned for each trick over six won by a team. The game is won by the first team to earn seven points, which normally requires several hands. After each hand, the deal passes to the player on the left.

I originally devised Open Whist as a substitute for whist when only two or three players were available, but it works well even with four. In all cases the rules of regular whist apply, with the following changes:

Four players After the cards are dealt, each player turns his cards face up one at a time and places them on the table (without rearranging them) in columns of one, two, three, four, and three cards, with the cards in each column overlapping, as shown below. Cards should face the center of the table so all players can read them easily.
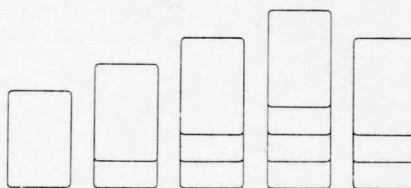
The single card at the left of the dealer's hand sets the trump. The cards on the top of each column—that is, the ones that are fully exposed—are the only cards that may be played. As usual, players must follow suit if possible.

For example, South was the dealer in the hand shown, and the ◇7 at his left establishes diamonds as trump. West has a choice of five cards to lead (♠ A, ♠ Q, ♠ 3, ◇10, ♡ 4), and after studying all four hands on the table chooses the ♠ Q. North must follow suit with either the ♠ 2 or the ♠ J, and chooses the ♠ 2, saving the higher spade in case it's needed later. East, who is West's partner, has no exposed spades and can play any of his five exposed cards. He picks the ◇ 2, a trump card. South, who must follow the opening suit, plays the ♠ K, his only exposed spade. Since diamonds are trump, East wins the trick. The four cards are put aside face down by East, as a record that he won the trick; these cards are no longer in play.

East now leads one of his exposed cards: ◇ 6, ♡ 2, ♠ 3 (uncovered after he played the ◇ 2 on the first trick), ♠ 10, or ♡ J. He might want to lead the ♠ 3, since his partner, West, has no exposed spades and can trump the trick with the ◇ 10.

Two players The players sit at right angles to each other. Four hands are dealt. Each player sets up and plays two hands, the one in front of him and the one across the table as if he had a partner. The single card in front of the dealer sets the trump. The opening play is from the hand at the dealer's left.

Three players Seventeen cards are dealt to each player. The last card is dealt face up to set trump but belongs to no player. The three hands are set up in columns of one, two, three, four, five, and two cards. A player scores one point for each trick over five. The winner is the first player to score seven points; an extra hand is played to break ties.

In all variations, the strategy of choosing which card to play is very important. Players must try to win not merely a particular trick, but should plan ahead so that they will have the right cards available (or safely buried!) at the critical times. A player may be out of a certain suit in one trick but may have it available for later tricks, when new cards have been exposed.

Open Bridge The rules of Open Whist can also be applied to bridge; bidding is done with all hands in view. The game plays well even with two players (who control two hands each) or with three (the highest bidder gains the extra hand as dummy).
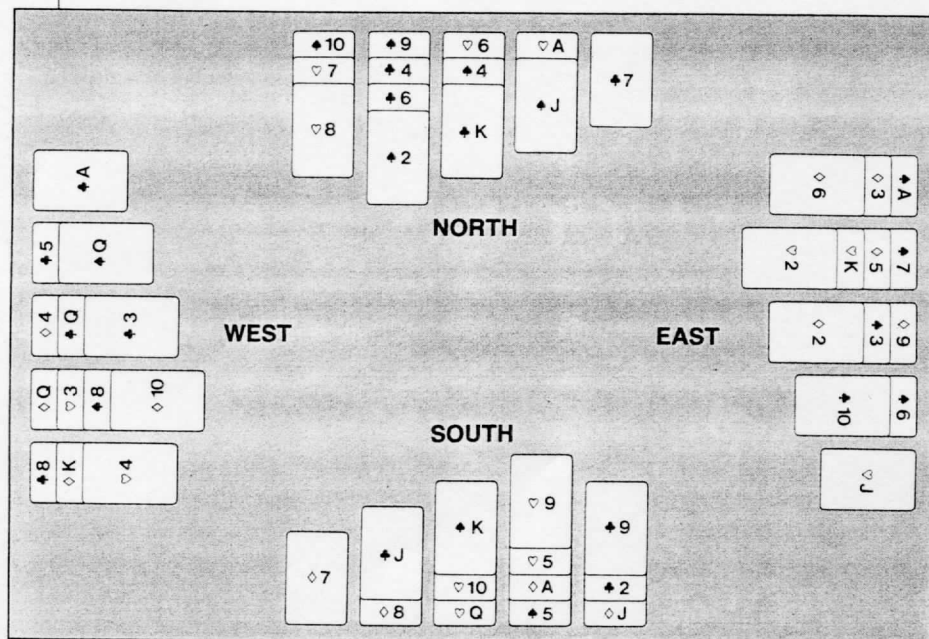
Triad

A STRATEGIC MELDING GAME FOR 2, 3, OR 4 PLAYERS

by Sid Sackson

Triad is inspired by the classic Oriental game of Mah-jongg, but is played with ordinary playing cards instead of tiles. Players try to fill their hands with various four-card sets, known as "melds," and extra points are scored for special combinations.

Equipment

Two or three players use two decks of cards; four players use three decks. In either case, only the aces through eights are used; the nines through kings are removed.

Dealing

One player is chosen to be the dealer, who shuffles and deals 12 cards face down to each player. The rest of the deck is placed face down on the table. The top card is turned face up and placed next to it, starting a discard pile. (In subsequent hands, the deal rotates to the left.)

Play

Players take turns in clockwise order, beginning with the player to the dealer's left. In turn, each player either draws a card from the deck or takes the top card of the discard pile. The player then ends his turn by discarding a card face up on the discard pile. Discards are overlapped so that all previous discards can be seen. However, only the top discard is still in play.

A player may only take a discard if it completes a meld (as described in the chart at right), and then must immediately lay the meld face up on the table. Once exposed, a meld may not be changed. A player may claim a discard even if it is not his turn. When this happens, it becomes that player's turn, and any players who are skipped lose their turns. The player then discards as usual, and play continues clockwise.

If two or three players want the same discard, preference is given to a player who can complete his hand (i.e., form his third meld) with that card. In case of tie, it goes to the player whose turn would have come first.

Scoring

When a player completes his hand by getting three melds, all players show their hands and score the value of their finished melds. Melds on the table score the same as melds in hand.

There are three types of melds, as shown in the chart. Melds may score 2, 4, or 8 points. Some melds—the "Doubling Melds" in the chart below—not only score points, but double the value of the entire hand as well. In addition, certain melds and combinations of melds—shown in the "Doubles" chart at right—double and redouble the players' scores. However, no hand may score more than 250 points. Hands that go over 250 points (called "over-the-limit" hands) count as 250. A hand with no melds scores zero, even if it qualifies for doubling.

Example: A player draws his first discard of the deal to complete the following three melds : ♠4-♥4-♦4-♣4, ♠5-♠5♥5-♥5, ♦A-♦2-♦7-♦8. First, the values of the melds are added up. The first is a "Sub in Fours," worth 2 points; the second is a Plain in Fours, worth 4 points; and the third is an Honor in Suits, worth 8 points. The total value of the melds is 14 points. Two doubles are added for completing the hand with no previous discards taken, and two more for a Balanced Hand, for a total of four doubles. The value of the melds is doubled four times, for a total of $14 \times 2 \times 2 \times 2 \times 2 = 224$ points.

Winning

Players can agree to play to any total. For a scoring system that makes special use of "over-the-limit" hands, see the Answer Drawer, page 58.

TYPES OF MELDS:

VALUES OF MELDS:	SUITS (Four cards of the same suit, in one of the combinations below)	PAIRS (Two pairs adding up to nine, with suits in one of the patterns below)	FOURS (Four cards of the same rank, either four different suits or two natural pairs)
SUB (2 points)	A234 3456 5678 A248 - (♣)	Mixed Pairs: Each pair has the same two suits (Example: ♦ 2-♥ 2-♦ 7-♥ 7 or ♣ 4-♥ 4-♣ 5-♥ 5)	All Four Suits (Example: ♠ 6-♥ 6-♦ 6-♣ 6)
PLAIN (4 points)	A256 3478 A357 2468 A248 - (♦ or ♥)	Two Natural Pairs, Red and Black: A "natural pair" is two identical cards. (Example: ♥ A-♥ A-♠ 8-♠ 8)	Two Natural Pairs, Red and Black (Example: ♠ 2-♠ 2-♦ 2-♦ 2)
HONOR (8 points)	A278 A248 - (♠)	Two Natural Pairs, Same Color (Example: ♦ 3-♦ 3-♥ 6-♥ 6)	Two Natural Pairs, Same Color (Example: ♣ 7-♣ 7-♠ 7-♠ 7)
DOUBLING MELDS	A248 (any suit)	Two Natural Pairs, all the same suit	Any Fours meld of aces or 8's

Note: Aces are low and count as 1's.

DOUBLES

Completing the hand
- With one or two melds already face up—1 double.
- With no discards taken except to complete final meld—2 doubles.
- With no discards taken, not even to complete the final meld—3 doubles.

Contents of the hand
- All red—1 double.
- All black—2 doubles.
- All one suit—4 doubles (don't also count doubles for all red or all black).
- All low (aces through 4's)—1 double.
- All high (5's through 8's)—2 doubles.
- All odd—1 double.
- All even—2 doubles.
- All of two ranks (such as all 2's and 5's)—2 doubles.
- Eight cards of the same rank—4 doubles if two or three are playing; if four are playing, 2 doubles plus 1 double for each additional matching card.
- 6 Natural Pairs—3 doubles (Note: Two identical Suit melds count as four natural pairs toward this bonus).

1-Meld Doubles
- Each doubling meld (as listed in chart)—1 double.

2-Meld Doubles
- Twins (two melds with the same ranks of cards, regardless of suit)—1 double.
- String (two Suit melds containing all ranks from ace to 8)—1 double.
- Perfect String (a String all of one suit)—2 doubles.

3-Meld Doubles
- All melds of the same type (all Suits, Pairs, or Fours)—1 double.
- All melds of the same value (all Sub, Plain, or Honor)—1 double.
- All Doubling melds—1 extra double.
- Assortment (one meld of each type: Suits, Pairs, and Fours)—2 doubles.
- Grand Assortment (one meld of each type and one of each value)—4 doubles.
- Super Assortment (a Sub in Suits, a Plain in Pairs, and an Honor in Fours)—6 doubles.
- Balanced Hand (12 cards that can be arranged in 6 pairs each adding up to nine)—2 doubles, less one double for each Pairs meld.
- Triplets (three melds with the same ranks of cards, regardless of suits)—4 doubles (do not count Twins).
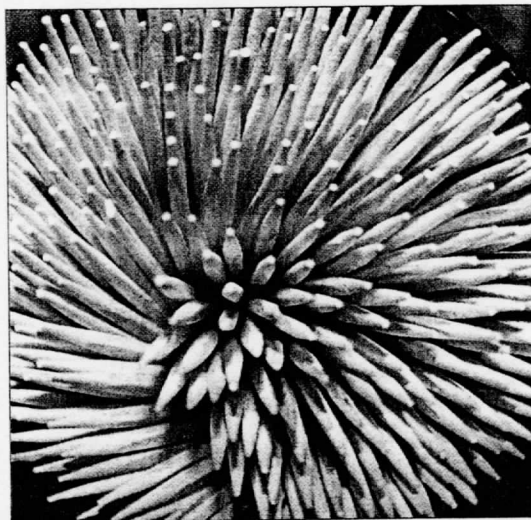- Fours in Sequence (three Fours melds of successive ranks)—1 double.

THINK TWICE

BY SID SACKSON

Think Twice is a pencil and paper game for two players competing on two boards, with two objectives. The game takes only a few minutes to learn, and about 15 minutes to play. But because the boards are different every time you play, each game presents a fresh challenge.

Players should use pencils (or pens) of contrasting colors.

To Start Each player takes a sheet of paper and draws a 6 x 6 board. Then each player randomly writes the numbers from 1 to 36 in the squares, one number in each square. Two sample boards are shown below. Choose one player to go first.

2	15	21	7	33	17
20	10	27	24	14	31
11	22	1	9	32	6
4	30	36	19	8	25
12	13	3	26	34	28
5	23	29	35	16	18

9	22	11	18	7	16
10	31	8	1	27	17
21	2	33	12	15	6
35	13	23	3	34	24
29	26	36	14	5	25
32	30	4	28	20	19

To Play Place the two boards next to each other. Each turn, a player chooses a number and colors the square containing that number *on both boards*. Thus, each player makes a move on each board each turn. Continue choosing numbers until all the squares are taken.

To Score Each player scores in two ways. First, players score for lines of four or more consecutive squares of their color in any direction (including diagonals) as follows:

Line of four	1 point
Line of five	3 points
Line of six	5 points

(Note that a line of five or six does not earn additional points for shorter lines of four or five contained within it.)

Second, each player adds up the largest group of connected squares of his own color on each board; and for each board, the player with the larger group scores the difference between the larger group and the smaller. For example, if, on one board, one player had a group of 15 and the other had a group of 12, the first player would score 3 points. Note: Squares must connect at the sides, not just at the corners, to be part of the same group.

Sample Game In the sample game at right, White defeated Black by a score of 15 to 14.

SAMPLE GAME

These two boards illustrate a completed game of Think Twice. Arrows indicate scores for lines of four or more consecutively colored squares. The final tally appears at the bottom of the page.

2	15	21	7	33	17
20	10	27	24	14	31
11	22	1	9	32	6
4	30	36	19	8	25
12	13	3	26	34	28
5	23	29	35	16	18

Board #1 White's largest group: 17 squares. Black's largest group: 13 squares. White scores 4 points for the larger group.

9	22	11	18	7	16
10	31	8	1	27	17
21	2	33	12	15	6
35	13	23	3	34	24
29	26	36	14	5	25
32	30	4	28	20	19

Board #2 White's largest group: 12 squares. Black's largest group: 12 squares. Neither player scores for a larger group.

SCORE

White		Black	
3 lines of four (1 point each)......	3	5 lines of four (1 point each).......	5
1 line of five (3 points each)........	3	3 lines of five (3 points each).....	9
1 line of six (5 points each).........	5	0 lines of six (5 points each).......	0
Bonus on Board #1..................	4	Total	14
Total	15		

60	60	60	60
40	40	40	40
30	30	30	30
20	20	20	20
10	10	10	10
green	red	blue	yellow
red	blue	yellow	green
blue	yellow	green	red
yellow	green	red	blue

SCORE UP

by Sid Sackson

A Puzzle-Game for One Player

Equipment Four pieces each of red, blue, green, and yellow; and the board shown.

Object Advance the 16 pieces as far as possible, so as to cover the highest scoring spaces.

Setup Place the pieces in the bottom four rows of the playing board, as indicated by the colored circles in the spaces.

Play Move one piece at a time. Pieces move straight up the board, always staying in their columns. Only one piece may occupy a space at a time. Pieces may jump over other pieces, as long as they land on empty spaces.

There are three restrictions on movement:

1. A piece must move *exactly* as many spaces forward as there are pieces in the horizontal row it leaves from. Thus, if there are two pieces in a particular row, either piece may move forward two spaces. (After one such piece has moved, the other can only move one space, since it has become the only piece in the row.) At the start of the game, any piece may move exactly four spaces.

2. Two pieces of the same color may never be in the same row at the same time. Therefore, you may not move a piece to any row that already contains a piece of that same color.

3. The most advanced piece of a color may not make any one-space moves. Therefore, a piece that is alone in a row cannot move if the other three pieces of the same color are below it on the board.

Scoring When you cannot make any more forward moves, the game is over. Add up the values of the scoring spaces occupied by pieces. This is your score. (It may sometimes be easier to add up the value of the *unoccupied* spaces and subtract it from 640, the total value of all spaces.)

A perfect game of 600 points is possible, but not easily accomplished. A score of 500 points is excellent, and 400 points is very good.

Mini GOLF

♥3	♣7	◇J	♥J	♠9	♠A	♠3
♠J	♠2	♥Q	♣8	◇7	♥6	♠10
♠6	♣9	♣10	◇5	♣3	♥10	◇A
◇4	♣6	♣K	♠4	♠Q	♥7	♥9
◇10	◇Q	♣5	♣4	♥A	◇6	♥8
♠7	♠5	♥5	◇2	♣2	◇9	♣Q
♣A	◇3	♥4	♠8	◇8	♥2	♣J

Number of Players
One or more.

Equipment
A standard 52-card deck, a small marker (to represent a golf ball), and paper and pencil (for keeping score).

Setup
Remove any three kings from the deck, then shuffle and deal the remaining 49 cards face up to form a 7x7 array. Place the marker on the remaining king, which represents the first tee.

The Golf Course
The first "hole" is the ◇ A, the second hole is the ◇ 2, and so on through the ninth hole (the ◇ 9). Holes 10 through 18 are the ♠ A through ♠ 9. Each hole is also the tee for the next hole.

Hitting the Ball
The ball can be "hit" (i.e., moved) horizontally, vertically, or diagonally. The distance (in cards) the ball moves is determined by the two cards on either side of the ball, and at right angles to the direction of movement. The card with the lower number is subtracted from the higher; the king counts as 13, queens as 12, jacks as 11, numbered cards as themselves, and aces as 1. If the result of the subtraction is 6 or more, either 5 or 10 is subtracted, as necessary, to bring the result to a number less than 6.

If both cards are the same number, the result is 0. But instead of no move, this allows the player to choose any length move from from 1 to 5 cards in the given direction.

The ball may not be moved in a direction that would take it "out of bounds"—that is, past the last card in the line of movement.

If, because the ball is at the edge of the layout, there is only one card at right angles to the direction of movement, the other number is taken as 0 to determine the distance the ball is hit.

Example of Play
At the start of a game, in the card layout above, the ball is on the ♣ K, and the player must maneuver it to the ◇ A. The cards above and below the ♣ K are the ♣ 10 and ♣ 5. Since the difference is 5, the ball can't be moved horizontally left or right (it would go out of bounds). In one diagonal direction, the cards are ♣ 9 and ♣ 4; these also have a difference of 5, and would put the ball out of bounds.

Movement is possible in the other directions. The ◇ Q and ◇ 5, in the other diagonal direction, have a difference of 7, which is reduced by 5 to make a difference of 2; the ball could therefore move two cards up and to the left, or two cards down and to the right. Alternatively, the ♣ 6 and ♠ 4 allow the ball to move two cards straight up or down.

The best way to play the first hole is to move down two cards to the ♥ 5. From there, the ◇ Q and ♠ 8 allow a move of four cards diagonally up and to the right, landing on the ♠ 10. With the ♡ 6 to the left and no card to the right, the ball moves down one card (6−5=1) onto the ◇ A, completing the hole in a total of three strokes.

For the second hole, the best play is to move diagonally down to the ♡ 7, then left four cards to the ♣ 6. The ◇ 10 and ♣ 10 allow a choice of distance in the diagonal running from the ♠ 6 to the ◇ 8, and a move of two cards ends on the ◇ 2. Again, the total is three strokes.

The third hole can be played in four strokes, as follows: diagonally left and up to the ♠ 6, diagonally up again to the ♠ 2, down 1 to the ♣ 9, and down another 4 to the ◇ 3.

Winning
In a solitaire game, a player wins if his or her score—the total number of strokes taken on all 18 holes—is less than or equal to par. Par on each hole is 3, for a total of 54.

Variation with Rebounds
For a faster game, a movement is allowed even if it is greater than the number of spaces in that line. Instead of going out of bounds, the ball bounces

back onto the course.

If the ball is moving horizontally, vertically, or diagonally into a corner, it bounces back in the direction from which it came. If the ball is moving diagonally and hits the edge other than at a corner, it goes off in the other diagonal direction.

Par for this variation is only two strokes per hole, for a total of 36 for the 18 holes.

Example of Play with Rebounds

Using the same grid as before, start at the ♣ K and move five cards diagonally up and to the right. The ball moves over the ◇ 5, ◇ 7, ♠ A, and ♠ 10, and lands on the ♡ 10. The second stroke is one card to the right onto the ◇ A.

For the second hole, move straight down and bounce off the bottom, ending the five-card move on the ♣ Q. A move of three cards to the left then brings the ball to the ◇ 2.

To start the third hole, move three cards straight up to the ◇ 5. The two queens allow a choice of distance in moving diagonally down and left; choose 4 and bounce at the ♠ 7 to reach the ◇ 3 in two strokes.

For a More Challenging Game

Instead of moving any distance from 1 to 5 (in the appropriate directions) when the ball is between two cards of the same number, players can increase the difficulty of the game by allowing no movement in such directions.

Maximum Strokes

It rarely happens that a hole cannot be reached. But a player who feels that one is impossible may elect to move directly to the hole and take a score of 6 on that hole. This applies regardless of which variation is being played.

Two or More Players

Rules are as in the solitaire game, with the following changes.

Each player uses a distinct marker for a ball and has pencil and paper. Working to a time limit (30 seconds is recommended), each player writes down his or her first move. The moves are exposed simultaneously, and the markers are moved. If a player mistakenly indicates a space that cannot be reached, or fails to write down a space, his or her marker stays in its original location, but the player adds one stroke to his or her total for the hole. As players reach a hole, they drop out of play until all players have reached that hole. After 18 holes, the player with the lowest number of strokes is the winner.

EVENTS

GAME CONVENTIONS Three this month:
• Over 1,500 fans of Squad Leader, Risk, role-playing events, and miniatures will converge at Neo-Vention VI, June 5-7, at Kent State University, in Kent, Ohio. A game auction and art show will also take place. Prizes will be awarded. Entry fee is $15 for preregistration or $20 at the door. Contact: NEO-GS, P.O. Box 412, Cuyahoga Falls, OH 44222-0412.
• CampCon 5, which will be held June 6, in Astoria, Illinois, will feature role-playing games such as Star Trek, Champions, and D & D, and a variety of board games as well. Prizes will be awarded. Entry fee is $2. Contact: Kevin B. Sager, Box 833, Astoria, IL, or call (217) 322-3396.
• E. Gary Gygax, co-creator of Dungeons & Dragons, will be the guest of honor at Glathricon '87, June 19-21, in Evansville, Indiana. Activities include miniatures competition, art show and auction, seminars, a masquerade, and many gaming tournaments. Entry fee is $15. Contact: Evansville Gaming Guild, P.O. Box 15414, Evansville, IN 47716, or call (812) 853-7850.

VIDEO GAMES The 100 best video games of all time have been selected for the 1987 Video Game Masters Tournament, a nationwide competition, June 26-28. Contestants can play their favorite video game in one of the 330 Bally's Aladdin's Castle amusement centers in the U.S. The highest score will be submitted for the 1988 *Guinness Book of World Records*. Entry fee is $4. Contact: U.S. National Video Game Team, P.O. Box 1558, Torrance, CA 90505, or call (816) 471-2031.

JULY
DAY OF THE MONTH: JULY 1-31

"National Anti-Boredom Month" encourages people to avoid boredom in their lives. Some tips: avoid hype, avoid repetition, learn new stuff, have a wish list, be an explorer, and don't use age as an excuse not to do something. The Boring Institute is sponsoring a contest for The Most Boring Local News Event clipped from a local, daily newspaper. The winner will receive an official "Boring Award Certificate" and a copy of the Institute's new book, *Boring Stuff: How To Spot It, How To Avoid It*. Entries must include a 3-by-5-inch card with your name and address. Deadline is June 1. Send to: Contest, The Boring Institute, Box 40, Maplewood, NJ 07040.

BACKGAMMON "Chic" is probably the best way to describe this year's World Championship Backgammon Tournament, July 6-12, in Monte Carlo, Monaco. (Flight leaves July 4 from Kennedy Airport, NY, and returns July 13.) Participants in champion, intermediate, and novice divisions of play will enjoy this black-tie affair, which includes two cocktail parties and a formal dinner-dance. Entry fees range from $100 to $500. Contact: Les Boyd, International Backgammon Assoc., 1300 Citrus Isle, Ft. Lauderdale, FL 33315, or call (305) 527-4033.

FIFTIES FESTIVAL Dig out those poodle skirts and slick back those D.A.s for the 1950s Festival, July 14, at the Pacific Avenue Mall in Wildwood, New Jersey. This celebration of the fabulous fifties will feature sock-hop music, strolling entertainment, and Hula Hoop, bubble-gum blowing, and jitterbug contests. Contact: Dept. of Tourism, P.O. Box 609, Wildwood, NJ 08620, or call (609) 522-1407.

JUGGLING Things will definitely be up in the air at the 40th International Jugglers Association Annual Convention, July 13-19, in Akron, Ohio. In addition to workshops and performances, the U.S. Nationals will be held for a $1,000 prize and a trophy. Other contests are for street performances, juggling while running, and a juniors division. Contact: IJA, P.O. Box 29, Kenmore, NY 14217, or call (716) 876-5331.

TEDDY BEARS Bring your teddy bear to one of the largest gatherings of these cuddly critters at the All American Teddy Bears Picnic, July 18-19, at Peddler's Village in Lahaska, Pennsylvania. Festivities include teddy bear displays, parades, puppet shows, appraisals, restorations, and competitions. Over $2,600 in cash prizes will be awarded in numerous categories including Best-Dressed, Great Couples, Most Patriotic, and Best Vintage bear. The finale will show all the bears in a picnic setting. Contact: Peddler's Village, Box 218, Lahaska, PA 18931, or call (215) 794-5306.

Cross Currents

Here's a way to convert a standard, double-six domino set into a challenging board game for two players—and every time you play, the board is different! In addition to the domino set, you will need small playing pieces, seven each of two colors. Transparent bingo markers are ideal, but buttons, cardboard squares, or other small objects can be used. You will also need a pair of dice.

Setting Up: The 28 dominoes are randomly placed in a 7-by-8 layout. The diagram below shows one of the countless possibilities.

Each player's seven pieces are placed on his or her starting row. Each player throws the dice, and the higher total plays first.

How the Dice are Used: Each player takes one die. The first player throws his or her die and moves (as described below) according to the number thrown. Player 2 now throws his or her die, adds this number to the first player's throw, and moves for the total of the two dice.

Each player, in turn, throws his or her die and moves for the total points of this throw, plus the number showing on the opponent's die.

Moving: A piece can move to any adjacent, unoccupied space, but not diagonally. The number of points required to make a move is the difference between the numbers on the two spaces. However, if the two spaces have the same number, it still takes one point to make the move.

The player continues moving, with the same piece *or with others*, until the number of points available has been used. A player is permitted to stop before all of the points have been used. At no time can two pieces occupy the same space.

As an example, on the board below Player 1 starts the game with a throw of 6. One possible move is shown, taking 1+1+2+2 points. Player 2 throws a 3, for a total of 9. A move can be made as shown (1+1+3+2+1+1); but if, instead, the piece were moved straight ahead, it could move one space farther. And either player could have moved two or more pieces by allocating some of their points to each one.

Entering the Goal: A player may not move a piece into his or her goal (the opponent's starting row) until all of his or her pieces have been moved from the starting row. Once a piece is in the goal, no piece of that player may reenter his or her starting row. Pieces in the goal may be moved, even out of the goal if desired (though in that case, they are no longer counted as being in the goal).

Blocking: A player may not place pieces so that one or more of the opponent's pieces have no possible path to reach the goal. Any such move is illegal; it must be withdrawn, and a legal move made instead.
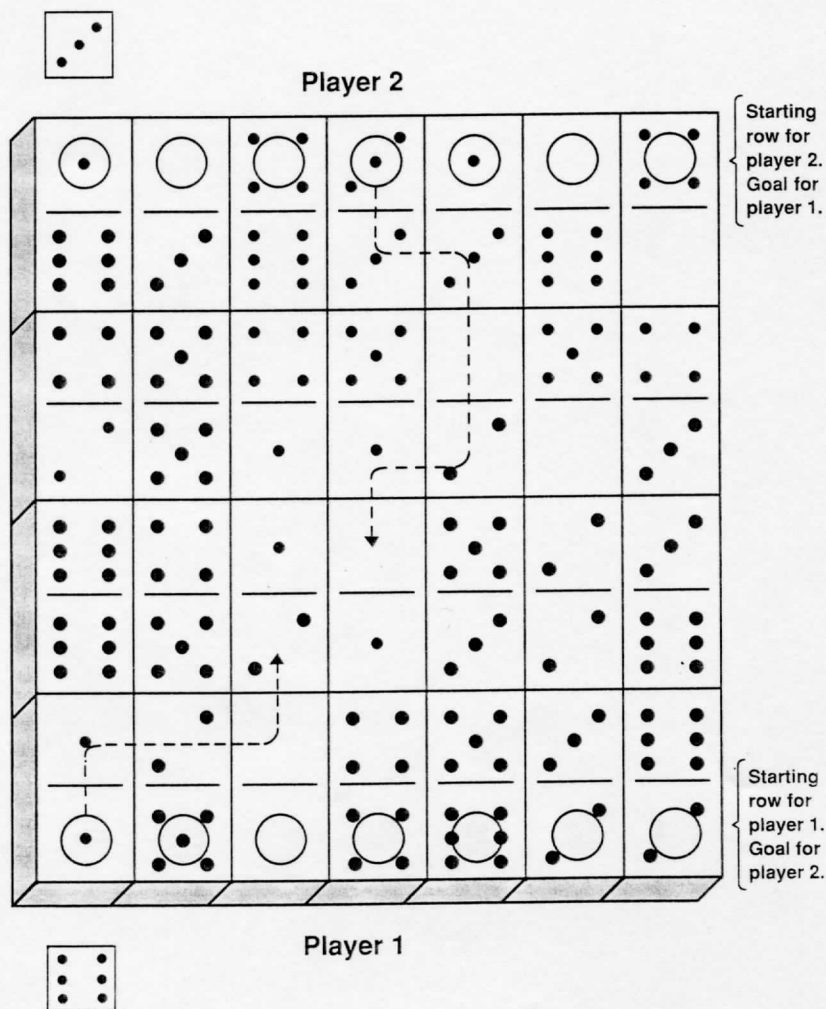
Winning: The first player to move all seven pieces into his or her goal is the winner.

Strategy: The goal must be "open" at all times, but each player may attempt to block all but the most difficult route for his or her opponent.

Scoring: Players may wish to use the following scoring method: After a player has moved all seven pieces into the goal, the opponent counts the number of points required to move his or her remaining pieces into the goal. The first player scores that number, plus a bonus of 10 points.

Play until one or the other player reaches an agreed total, such as 50.

Luck Game: If players wish to increase the element of chance, after the first player has moved for the throw of one die, each player in turn throws both dice to determine his or her move.

Player 2

Starting row for player 2. Goal for player 1.

Starting row for player 1. Goal for player 2.

Player 1

A Fast-Moving Strategy Game for 2, 3, or 4 Players

By Sid Sackson

★☆

In the ancient game of Nim, counters are arranged in rows, and players take turns removing one or more of them from any single row. The object is to take the last one. The most popular version has 12 counters arranged in rows of three, four, and five, but there are countless other variations. This new one, by the prolific game inventor Sid Sackson, is so fast and easy to learn you may forget you're playing a strategy game.

● **Equipment** The board shown and 36 markers, which can be pennies, buttons, or anything else, either all the same or different. The colored spaces are significant only in the advanced game.

● **Max-I-Nim for 2 (the basic game)** Place one marker in each board space and decide who begins. The first player removes *any two adjacent* markers in any straight line, vertical, horizontal, or diagonal. The other player then removes *two or three* adjacent markers in any straight line. Thereafter the players take turns removing *two, three, or four* adjacent markers in any straight line. The player who removes the last group is the winner. Note that a single marker may never be removed.

Variation 1: The player who removes the last group *loses*.
Variation 2: Before the first player takes a turn, the opponent alters the board by removing *any three unconnected* markers.

● **Max-I-Nim for 3** Add the following rules to the basic game (the two variations do not apply).

At the start of a game the players agree on the number of rounds. Play rotates to the left.

The winner of a round (the player who has removed the last group) receives *two points* for each marker he or she has removed that round. The player to the winner's left receives *one point* for each marker removed. The third player receives *nothing*. The player who scored nothing plays first in the next round.

Variation: A more competitive game is achieved by having the winner of a round and the player who scored nothing in that round switch seats for the next round. Again, the zero-scorer plays first. The player with the highest score after the last round wins. In case of a tie, an additional round is played.

● **Max-I-Nim for 4** The play is the same as Max-I-Nim for 3 except for the scoring: The winner of a round receives *three points* for each marker held; the player to the winner's left receives *two points* per marker; the next player to the left receives *one point* per marker; the fourth player gets *nothing*.

ADVANCED MAX-I-NIM

● The colored spaces on the board are used in the advanced game, and you will also need four "color keys" (small cardboard squares will do) colored on one side to match the four colors on the board. At the start of a round players receive keys. Players may remove markers from colored spaces that match their keys and from uncolored spaces, but not from spaces that match other players' keys.

● **Advanced Max-I-Nim for 2** A key of each color is placed color-side down. The players each randomly pick two, and all are then turned face up. The play is the same as the basic Max-I-Nim for 2, except as follows:

The players agree on the number of rounds to be played. Keys are chosen anew for each round. The player with the most points after all rounds have been played wins the game.

The winner of a round scores one point. If a player is unable to remove a group, the other player, having removed the last group, wins the round, earning one point. If at that point there are other groups with markers that match the winner's key(s), he or she may remove them as well, earning one additional point for each such group.

Variation: For the second round, players exchange keys and the right to move first. These two rounds constitute a set. For the next set new keys are drawn. The player with the highest total after the agreed number of sets is the winner.

● **Advanced Max-I-Nim for 3** Three rounds constitute a set, and the number of sets to be played is agreed beforehand.

All four keys are placed face down, and the players each pick one randomly and turn it up. The fourth key is ignored. When the player whose turn it is cannot take a group, the last player to have removed a group is the winner of the round. No extra points may be scored. At the end of a round, each player passes his or her key to the player on the left. The right to play first also rotates.

● **Advanced Max-I-Nim for 4** Four rounds constitute a set and the number of sets is decided in advance.

All keys are placed face down and the players each draw one. At the end of a round, the keys and the right to move first are passed to the left.

Variation: Prepare a second set of keys. To play, two keys of each color are placed face down and mixed up, and each player randomly draws two. A player with keys of two colors can take markers from each of those colors. A player with two keys of the same color can use only that color. ■

MAX·I·NIM
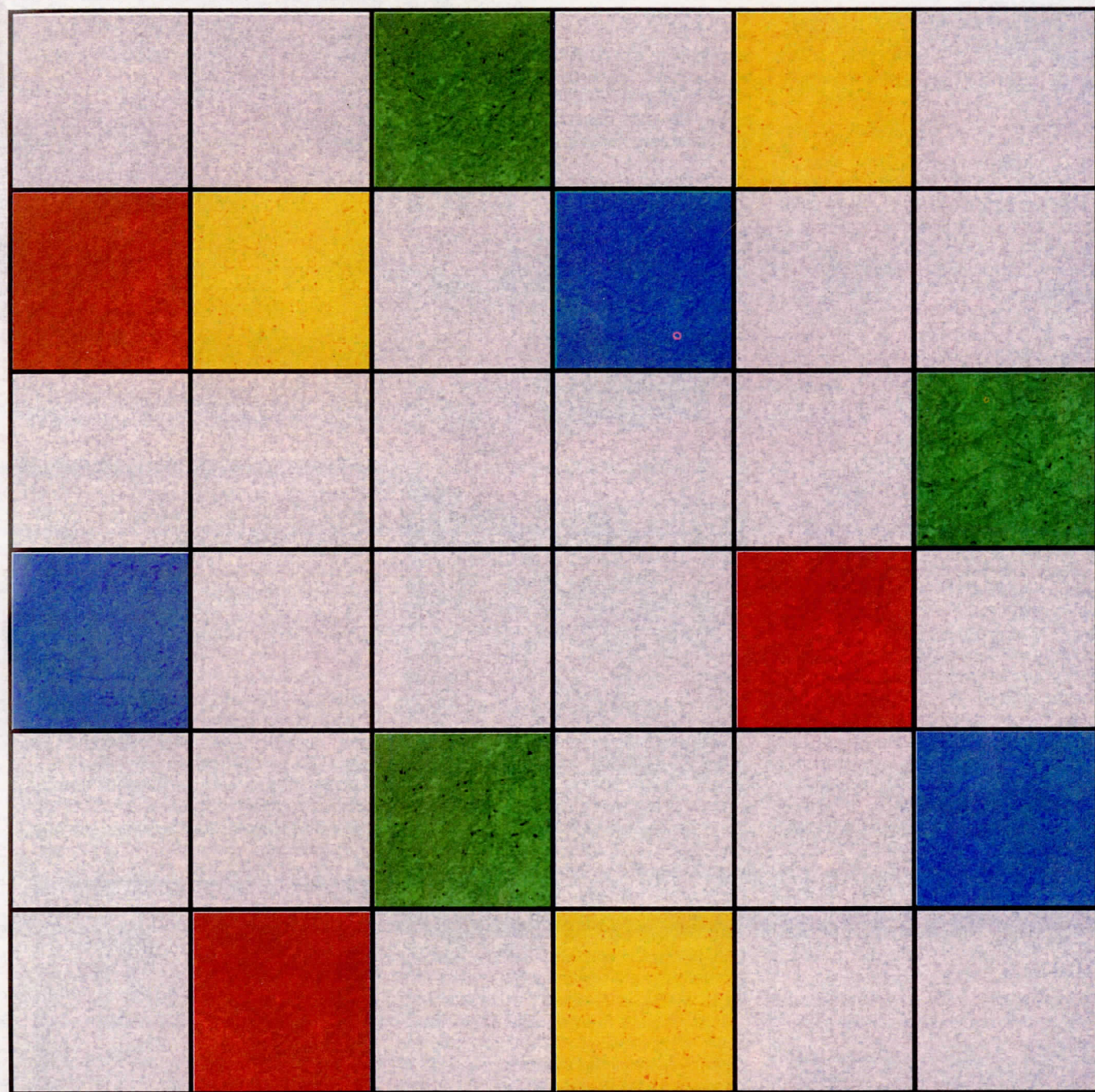
TROMINO GO

is an unusual and challenging game of pure skill. The name combines the shape of the pieces (tromino) with the name of a classic game (go) in which surrounding pieces also plays an important role.

Equipment 15 black and 15 red trominoes. Five of each color are marked A, five are marked B, and five are marked C. Each tromino has two long sides and four short sides, as shown in the diagram. A short side is considered one unit of edge and a long side two units of edge.
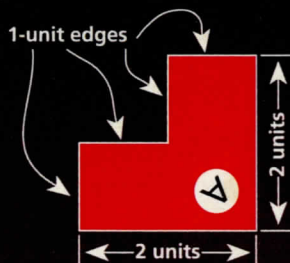

Number of players Two; one (known as "Black") uses the black pieces, and the other ("Red") uses the red pieces.

Play of the first four trominoes Black always plays first. The loser of a game is Black in the next game.

Players take turns placing one tromino at a time in the sequence A, B, C, A, B, C, etc. Black starts by placing a black A tromino on the table. Red now places a red B tromino so that it adjoins the black one along at least two units of edge. Black then places a black C tromino so that it adjoins the red one along at least two units of edge but does not touch any edge of the black A tromino. Red similarly places a red A tromino so that it touches at least two units of edge of the black C tromino but does not touch any edge of the other red tromino.

Here is one of the many possible configurations after the first four plays:
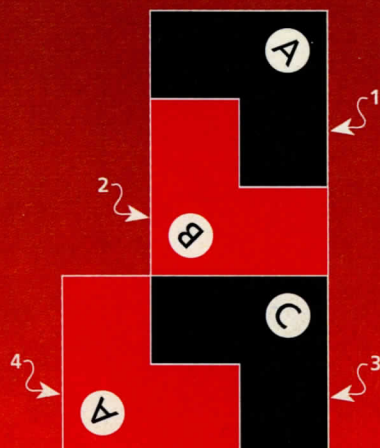
Play after the first four trominoes The game continues with each player in turn placing the next letter in sequence (B, C, A, B, C, etc.) in accordance with the following rules. (Note that these rules differ from those used in placing the first four trominoes.)

1. No trominoes of the same letter, regardless of color, may touch along any edge.
2. The placed tromino must adjoin an opposing-color tromino along at least one unit of edge.
3. The placed tromino must adjoin at least two units of edge, which can belong to any one or more trominoes, as long as the first two rules are obeyed.

Winning the game When one of a player's trominoes or group of adjoining trominoes are surrounded so that no edge is open, the game is over and the opponent scores as many points as the number of trominoes he or she has surrounded. Important: A tromino is not surrounded if it can trace a path to an open edge through one or more trominoes of its own color.

No man's land In the placement of the trominoes it is possible for one or more squares of empty space to be enclosed. This becomes a no man's land that can serve to surround trominoes of either color.

If a player places a tromino that, by forming a no man's land, causes trominoes of both colors to be surrounded, the difference between the numbers of surrounded trominoes determines the victory. If the number is the same it is a tie game.

A player may sometimes deliberately cause his own tromino or trominoes to be surrounded so as to end the game and prevent his opponent from scoring more points.

Moving trominoes If all 30 trominoes have been placed without producing a winner, players continue by moving trominoes of the proper color and letter to new positions in the layout. A moved tromino must be taken only from an edge of the layout, and removing it may not result in separating the layout into pieces.

Winning the game by moving a tromino scores double.

Sample game We'll follow the game started in the previous diagram.

Black has now lost. If his next tromino were an A he could place it so as to join his threatened C (the one played in turn 3) to his two trominoes at the bottom, thereby saving himself. However, he must play a C. He could place it in the area indicated by the dotted lines, but that would create a no man's land and complete the surrounding of his threatened tromino. If
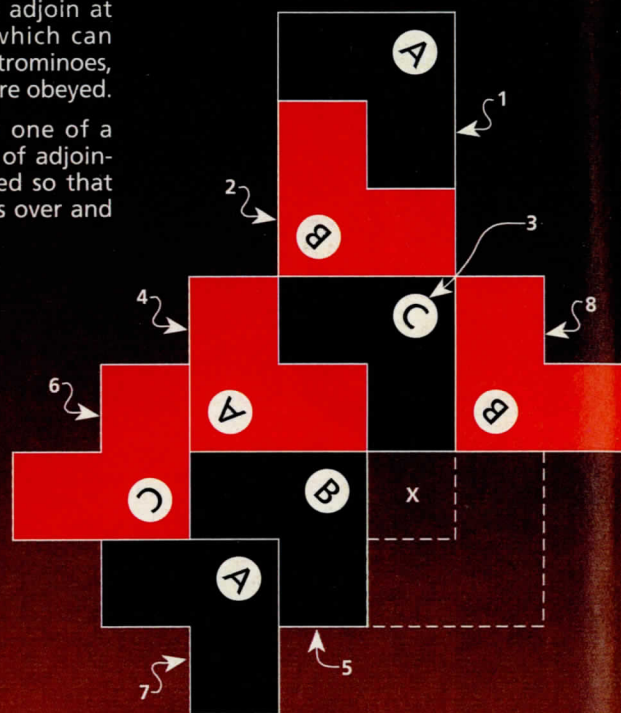
Black plays anywhere else, Red then uses his A tromino to finish the game by covering the area marked X, surrounding the C piece above it.

Playing a series of games Beginning players may wish to ignore the rules that pertain to scoring points and simply play to win the game. Once players gain some experience, they may prefer to incorporate the point-scoring rules and play a series of games up to an agreed point total, such as 7.

A final word To avoid having to think about which letter tile to play next, players will find it convenient to stack their tiles in order before the game starts. From the top down, Black's stack should be arranged A, C, B, A, C, B, etc., and Red's should be ordered B, A, C, B, A, C, etc.

BY SID SACKSON

TROMINO GO
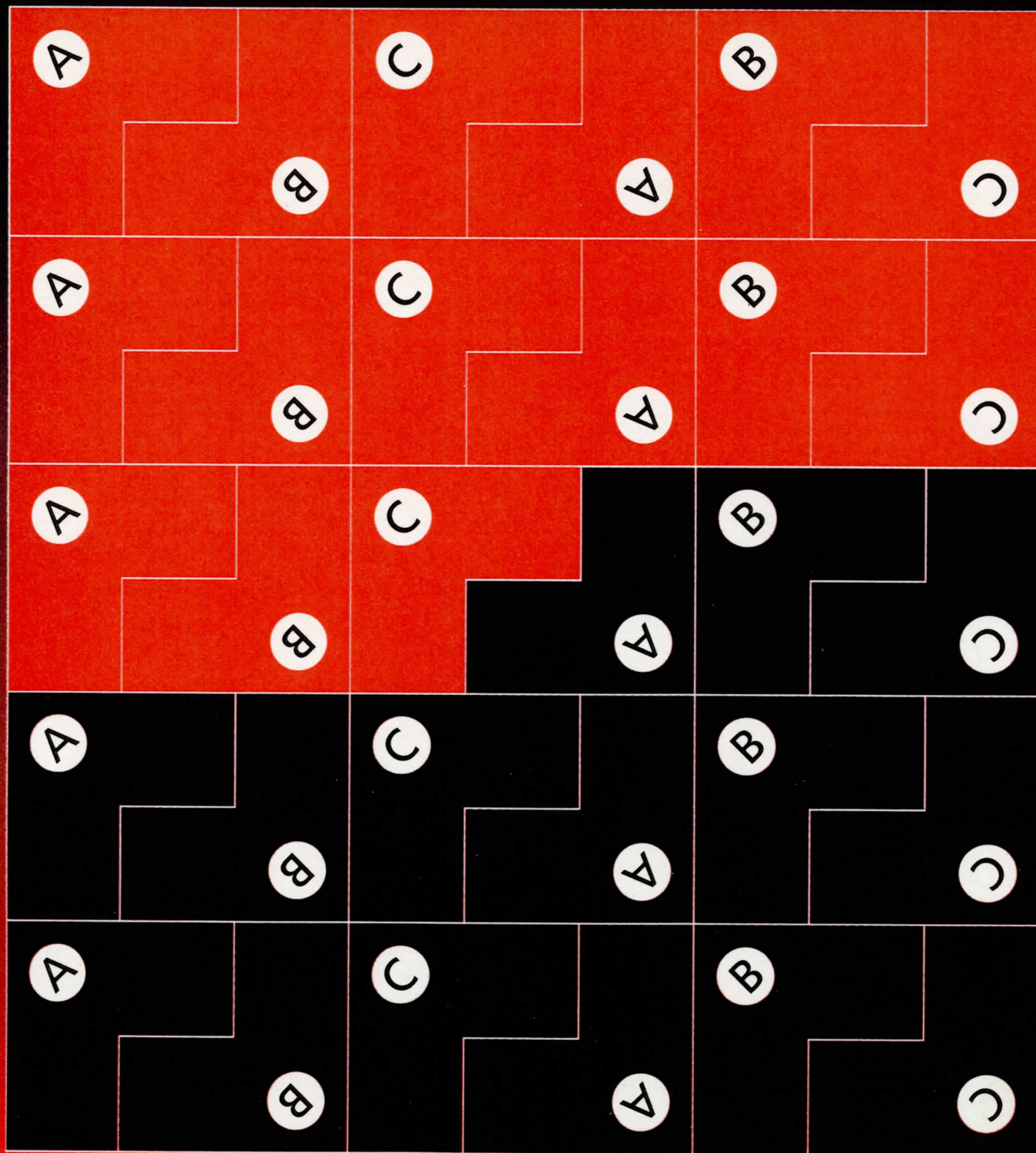
PENNYWISE

THE STRATEGY GAME OF COMMON CENTS by sid sackson

This original, two-player game was inspired by Nim— the popular game, played with piles of objects, that was invented by mathematician Charles Bouton in 1902.

**EQUIPMENT** The board below and 49 pennies (or other small objects)

SETUP Place one penny on each of the 49 spaces (shown as objects) below. Each player then chooses one penny anywhere on the board and removes it, leaving 47 pennies.

PLAY Each player, in turn, removes either **two** or **three** pennies from the board. The pennies removed during a turn must all lie in a single horizontal or vertical line, with no empty spaces separating them.

OBJECT The last player to be able to take a turn wins.

EXAMPLE In this position, removal of the circled pennies leaves only isolated single pennies on the board, ending the game.
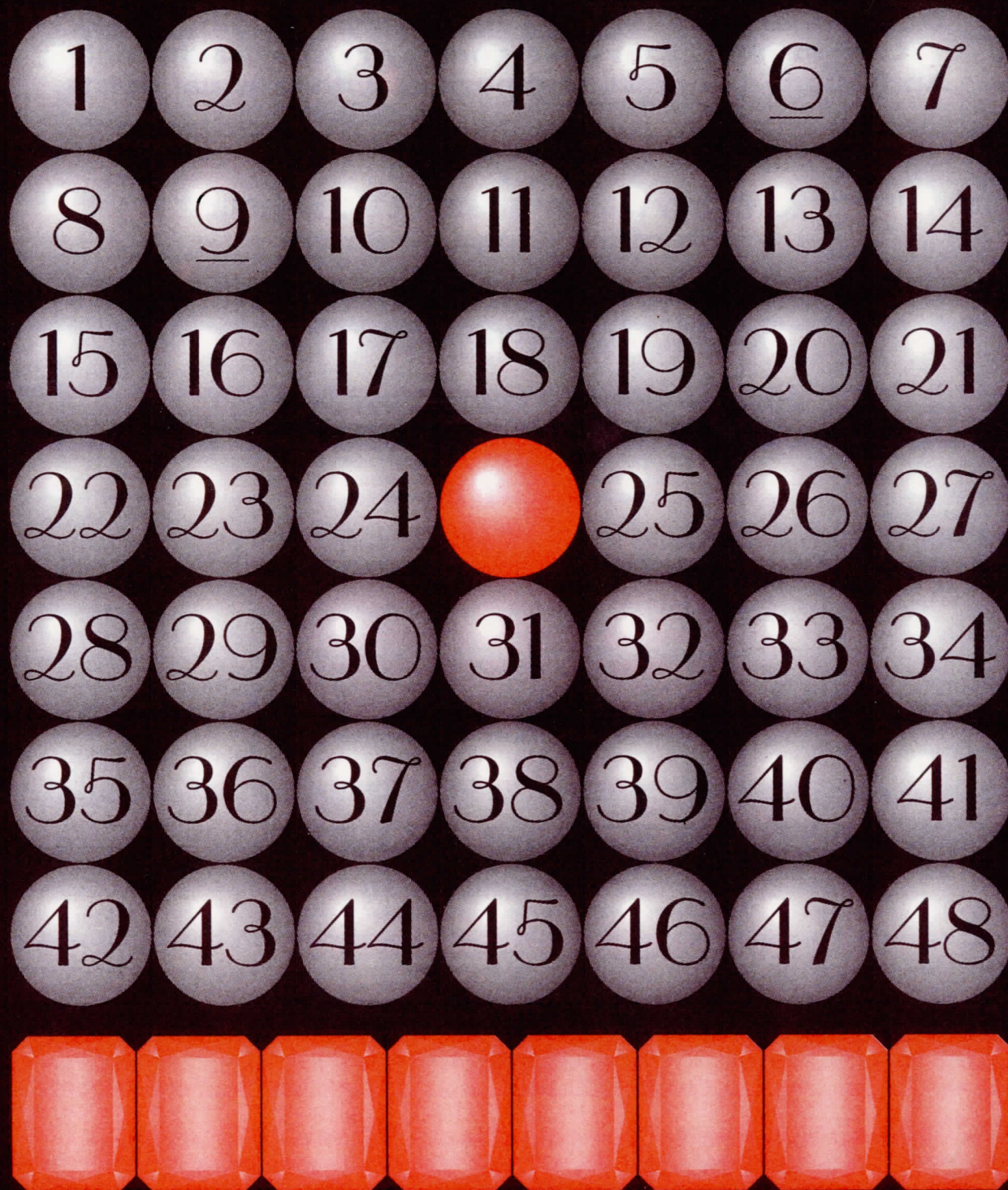
STRATEGY TIP Try to create a position in which the remaining pennies are divided into two disconnected groups of the same shape. Then mimic your opponent: Whatever pennies he or she removes from one group, make an equivalent play in the other group, and you'll be sure to get the last turn.
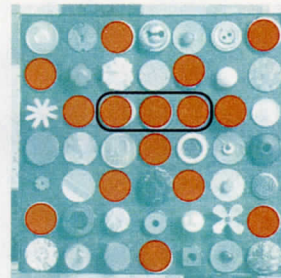
String of Pearls

Pop out these pieces—48 numbered Pearls, one red Power, and eight gemlike
Trade tokens—to play the game on pages 50–51.

1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27
28 29 30 31 32 33 34
35 36 37 38 39 40 41
42 43 44 45 46 47 48

An Original Game
by Sid Sackson

String of Pearls

This intriguing boardgame can be played by 2 to 4 players, or solitaire. It can be learned in minutes, and is likely to appeal equally to both casual and serious game enthusiasts. To play, you'll need the board at right and the 49 pop-out pieces on page 19 (48 Pearls numbered from 1 through 48, plus one red Power piece). For the optional Trading Variation, you'll also need the eight Trade tokens on page 19.

Rules for 2 to 4 Players

Setup After the pieces have been popped out, they are placed facedown. Each player draws one piece; the player with the highest number plays first, and the others follow in clockwise order. (A player who draws the Power draws again.) Then all the pieces are mixed up and randomly placed faceup on the board, one piece per square.

The Play Each player in turn moves the Power in any direction, including diagonally. Movement continues any number of squares in a straight line until the first Pearl (which might be in an adjacent square—as it must be on the first turn of the game—or several squares away) is reached. The player takes that Pearl and places the Power in the square.

The Power may not be moved onto an empty square. If, toward the end of the game, no Pearl is in a straight line from the Power, the player chooses any one of the remaining Pearls and moves the Power to that square.

Forming Strings When a player has two or more Pearls that are in numerical order (such as 17-18-19), they form a String. As the player gains more Pearls, his or her Strings can increase in length. All Strings (as well as other Pearls) must be placed so that they are in plain view of all players.

Winning When all of the Pearls have been taken, the player with the longest String is the winner.

If two or more players tie for the longest String, the players who tie compare their next-longest Strings, and the player with the longest wins. If there is still a tie, the players' third-longest Strings are compared—and so on. (For example, a player with two Strings of 4 beats a player with a String of 4 and three Strings of 3.)

Scoring Variation Play is the same as in the standard game, but the winner is determined differently. Each String scores according to its length, as listed in the following table, and the player with the highest total wins.

| Pearls	Points
2	3
3	6
4	10
5	15
6	21
7	28
8	36
9	45
10	55
11	66

Trading Variation Play is the same as in the standard game, except that each player is given two Trade tokens at the start of the game. On any two turns during the game, a player may make a trade. After taking a Pearl, the player passes any of his or her Pearls to a chosen opponent. In return, the player takes a Pearl from the same opponent. *Important:* The Pearl taken may not be part of a String. After trading, the player discards a Trade token.

Rules for Solitaire Play

The player moves the Power and takes Pearls as in the standard game. A Pearl that does not fit onto a String must be placed by itself as a new String. (Note: In the solitaire version only, a single Pearl is considered a String.) A Pearl may *never* be placed so as to join two existing Strings. For example, a player who has 31 and 33-34-35-36, and who then takes 32, must join 32 to 31 or to 33-34-35-36, but not to both.

When all 48 Pearls have been placed, the player removes any Strings that have 6 or more Pearls. The number of remaining Strings is the player's score. A score of 2 Strings is fair; 1 is very good; and 0 is a complete victory.

ILLUSTRATION BY FRED SMITH
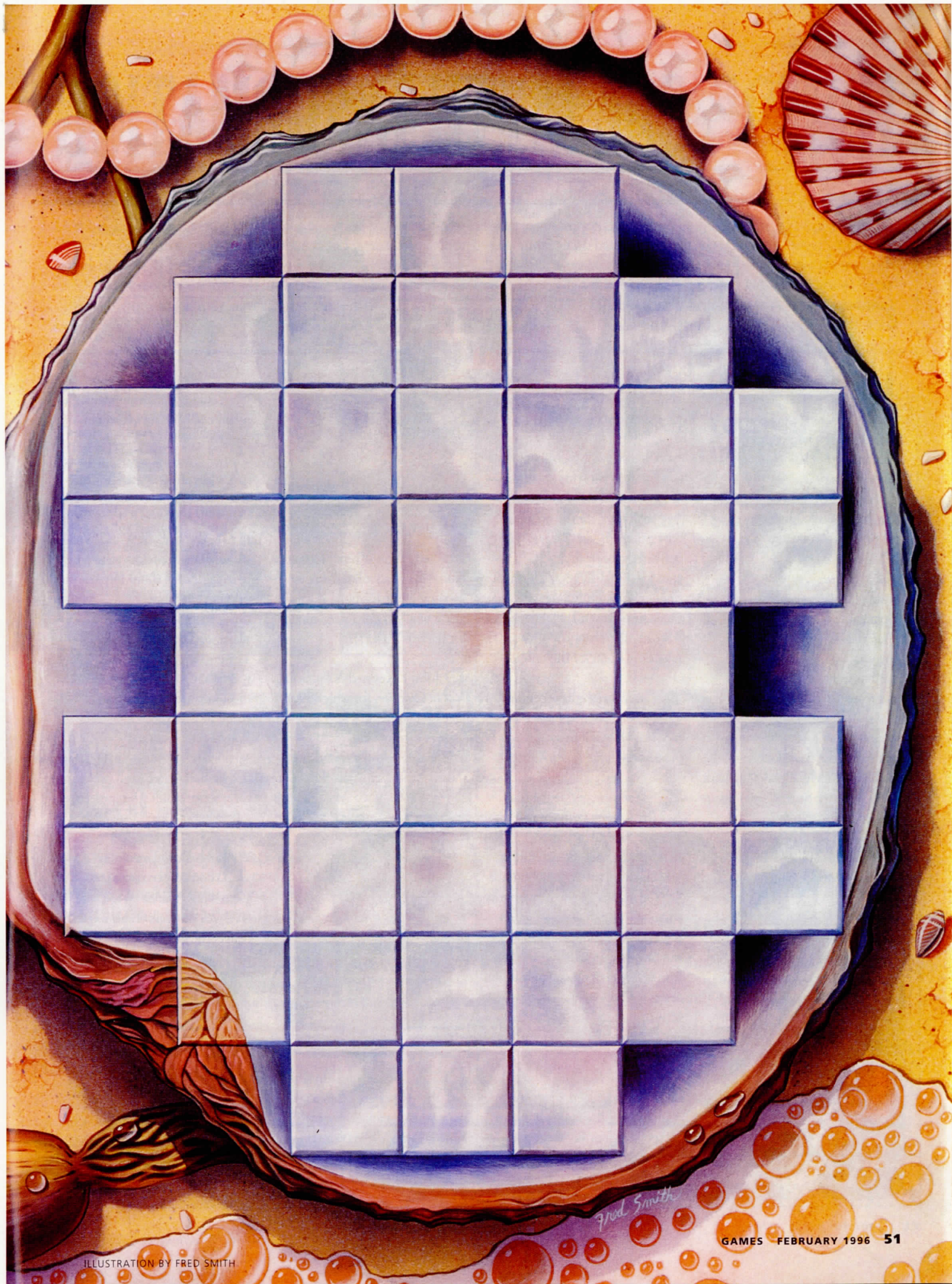
Wiretap

A Two-Player Paper-and-Pencil Game of Deductive Logic

BY SID SACKSON

The Playing Fields

On a sheet of paper, draw two 5x5 grids like the ones to the right. On a separate sheet of paper, your opponent does the same. One grid is for setting up a secret "network" of wires. The other is used to record information about the opponent's network, the layout of which you will be trying to deduce.

Setting Up the Networks

Draw ten groups of straight lines, known as "wires," in your grid. Each group of wires must be three spaces long, and you must draw one group in each row and one in each column of your playing field. The number of wires in each group must be as follows:
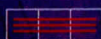
Three groups consist of a single wire:

Three groups consist of a double wire:

Two groups consist of a triple wire:

Two groups consist of a quadruple wire:

The accompanying diagram shows one of the many possible networks you can draw.

Tapping the Wires

After each player has secretly drawn a network, each player decides on a space he or she wishes to "tap" for information. This space is announced to the opponent, who reveals the number of wires in that space. For example, if in the previous diagram space A5 is asked, the answer is four wires. In the same diagram, space A4 has one wire and space A2 has none. No information is provided about the number of groups in the space, nor about whether the wires run horizontally or vertically.

After each player has recorded the information received, each player taps another space and is again told the number of wires located there. Play continues in this way until one player decides that he or she can guess the location of all the wires in the opponent's network.

Winning

When a player is ready to guess, he or she tries to draw the opponent's network. This drawing is compared with the opponent's original drawing. If the guessing player is correct, he or she wins a single game; if incorrect, the opponent wins a double game. Since turns are considered to be simultaneous, it's possible for both players to guess at the same time. If both are correct or both are incorrect, the game is a tie. But if one player is correct and the other isn't, the correct player wins a triple game.

Sometimes different networks, such as the two shown here, have the same number of wires in each space. If all the corresponding squares in both the guess and the actual network have the same number of wires, the guess is considered correct.

Variations

1. Make one each of the single, double, triple, and quadruple wire groups four spaces long instead of three.

2. Use a 6x6 playing field. Make the groups four spaces long and use three of each type.

3. Play the same as in the previous variation but make one of each of the four types of wire groups five spaces long instead of four.

COUNTER ATTACKS

Three Checkers Variants *by Sid Sackson*

For the checkers player in search of a diversion, here are three related variants. To play them, you'll need to modify a regulation checkers set by adding a number to one face of each checker. Each player's set should consist of two 1's, two 2's, two 3's, two 4's, two 5's, and two 6's. (Self-adhesive circles such as those found at stationery stores will eliminate the need for cutting and gluing.)

♚ GAME 1

Turn the men number-side down, mix them, and place them on the board as in regular checkers. After all the men have been placed, turn them face up. To determine the first player, check the numbers at the left end of each player's bottom row; the higher number goes first. If the numbers are the same, the next number to the right is checked, and so on.

The diagram below shows a game after a few moves have been made—Black, with a 6 in the corner compared with Red's 3, played first.

All the rules of play are the same as in regular checkers except that a piece—either a man or a king—can only jump an enemy piece that is the same number or lower. For example, a 6 can jump any piece; a 5 can jump any piece except a 6; a 1 can only jump another 1.

To see how this can work, look at the diagram again. It is Red's turn, and Red is forced to make a jump. The Black 5 cannot be jumped by either the 2 or the 4, so Red must jump the Black 2 with the 6. Black springs the trap by in turn jumping the Red 6 with his or her 6.

When a man becomes a king it keeps the same number, the crowning piece being inserted below.

A player wins by capturing both enemy 6's. A player also wins if the opponent is not able to make any move or jump when it is his or her turn. If both players' forces are reduced to the point where neither can win in one of the above ways, the numbers on each player's remaining pieces are added and the player with the higher total wins. If the totals are the same, the game is a draw.

♚ GAME 2

The placement of the checkers and the choosing of the first player are the same as in Game 1.

All the rules of play are the same as in regular checkers, except that a score is kept on a sheet of paper.

When a player makes a jump, the player scores the difference between the number of the jumping piece and the jumped piece—regardless of which is higher. For example, a player who jumps a 3 over an enemy 5 scores two points; while jumping a 5 over an enemy 3 likewise scores two points for the player doing the jumping. If the numbers are the same, there is no score.

If, however, the piece jumping and the piece jumped add up to seven or eleven, the score is seven or eleven—not the difference between the two numbers. For example, a player who jumps a 5 over an enemy 6 scores eleven points.

In the diagram at right, it is Black's turn to play. The 4 must jump the 5, scoring one point, and then the 1, scoring three points. (In multiple jumps, each jump is scored separately.) Red now jumps the 3 over the Black 4, scoring seven points.

Play continues until one player has lost all his or her pieces, or until a player on his or her turn is not able to move or jump. In either case, the player with pieces (or mobile pieces) remaining adds up the numbers on those pieces and adds it to his or her score. When both players have remaining pieces that they can move but no further jumps can be made, both players add their remaining number totals to their scores.

The player with the higher score is the winner.

♚ GAME 3

The placement of the checkers and the choosing of the first player are the same as in Game 1.

All the rules of play are the same as in regular checkers, except that a score is kept and no kings are crowned. Enemy men when jumped are placed face up in front of the capturing player. When a man reaches the king row, it is not crowned; instead, it is taken from the board and placed in front of its owner.

The winner is the first player to have in front of them (from making captures and advancing to the king row) men whose numbers add up to 30 or more points.

For a faster game, play to a smaller total; for a longer game, play to a greater total.

FAIR PLAY SETUP

To avoid the inevitable complaints that one player's starting position is inferior to the other's, the following variation can be used in any of the three games. After the men are placed and the first player is determined, the other player rearranges his or her men to duplicate the first player's starting position.

An alternative is to allow both players to arrange their pieces however they please. Players take turns placing one of their pieces on the board either number-side up, for a purely strategic game, or number-side down, in which case neither player will know the other's plans until all the pieces are placed and turned face up.
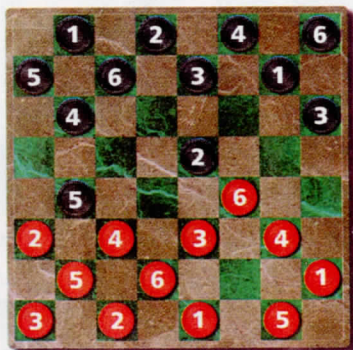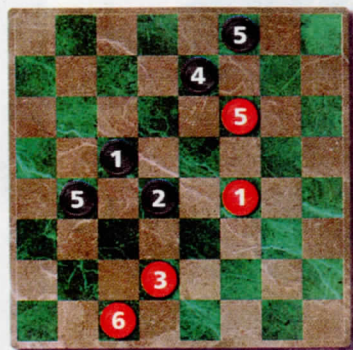
Psychology and strategy play equal parts in this dramatic game, where winning big isn't as good as winning little.

By Sid Sackson

1	1	2	2	3
3	4	4	5	5
6	6	7	7	8
8	9	9	10	10
11	11	12	12	13
13	14	14	15	15
16	16	17	17	18
18	19	19	20	20
21	21	22	22	23
23	24	24	25	25

EQUIPMENT

- GOTCHA! gameboard
- 25 purple and 25 green playing pieces; each set numbered from 1 to 25.
- One "First Move" marker

TO START

Cut out the playing pieces at left and distribute one set of 25 to each player. Cut out and place the "First Move" marker below on the upper left corner of the board, pointing to either the green or purple arrows. Decide who will go first.

PLAY

The player with the First Move marker pointing at his or her color starts by placing one piece number-side down on any one of the arrows of the same color. (You can look at the number—just don't let your opponent see. You may find it helpful to use a book as a screen to keep your opponent from seeing your pieces.) The other player then chooses a piece and places it on an arrow of his or her color.

Next, both players turn their pieces on the board over so the numbers show. The piece with the lower number is moved onto the space on the board that is at the intersection of the two covered arrows (see Diagram A on the next page). The higher number is then placed, number-side up, on top of the lower number, indicating the winner of that space (Diagram B). Note: The fewer points you win a space by, the better, because winning by a lot means you've wasted a piece that was higher than you needed. So if you win a space by one point, you can gloat by yelling "Gotcha!"

If both players have the same number, neither wins the space. This is indicated by leaving the upper piece (it doesn't matter whose) number-side down.

The player moving first may not place a piece on an arrow that leads only to spaces that already contain pieces. The second player must always choose an arrow that points to an empty square in the row or column selected by the first player.

Turn the First Move marker toward the other player after each turn. Play until all 25 board spaces are covered.

SCORING

At the end of the game, you earn one point for each space won. In addition, you score bonus points if you have won 3, 4, or 5 consecutive spaces in a vertical or horizontal row (diagonals don't count). Each row of 3, 4, or 5 scores 3, 4, or 5 bonus points, respectively. High score wins. (For an example of how to count up the score, see Diagram C.)
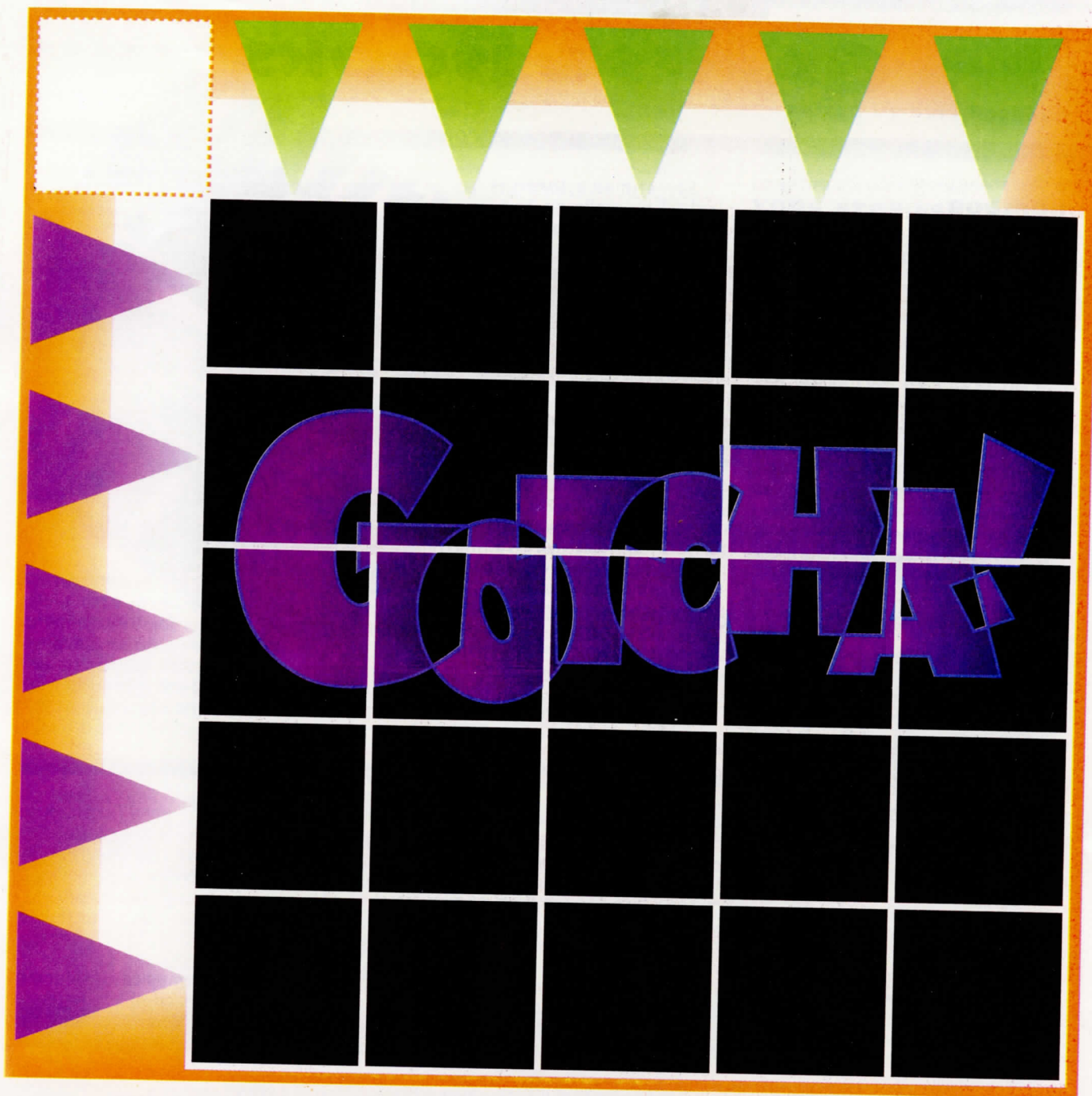
FIRST MOVE

STRATEGY

Trust us—this is something you'll have to figure out for yourself.

GOTCHA!

The Board Game That'll Getcha Goin'

Diagram A

Diagram B

If players enter 13 and 9 as shown in Diagram A, the green 13 is placed on top of the purple 9 on space X, as shown in Diagram B.

Diagram C

Purple score = 12 (1 point for each space won) + 11 (bonus points for one line of 5 in a row and two lines of 3 in a row) = 23

Green score = 11 (1 point for each space won) + 9 (bonus points for three lines of 3 in a row) = 20

Sid Sackson in Games Magazine

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I have put all the games and articles in chronological order.
But just to confuse matters, here they are in categories.
And to further confuse matters, the games are listed chronologically
within their categories.

Pencil Games

A Stock Market Game
The Great Races
Oil Strike!
Spy
X and O
Closing In
Last Ditch
Loop-the-Loops
Score Five
Think Twice
Wiretap

Board Games

Odd & Even
Breakaway
Score Up
Max-I-Nim
Tromino Go
Pennywise
String of Pearls
Gotcha!

Articles and Variants

Eleusis
Open Whist
Counter Attacks

Card Games

Triad
Mini Golf

Other

Wtht Vwls
Cross Currents