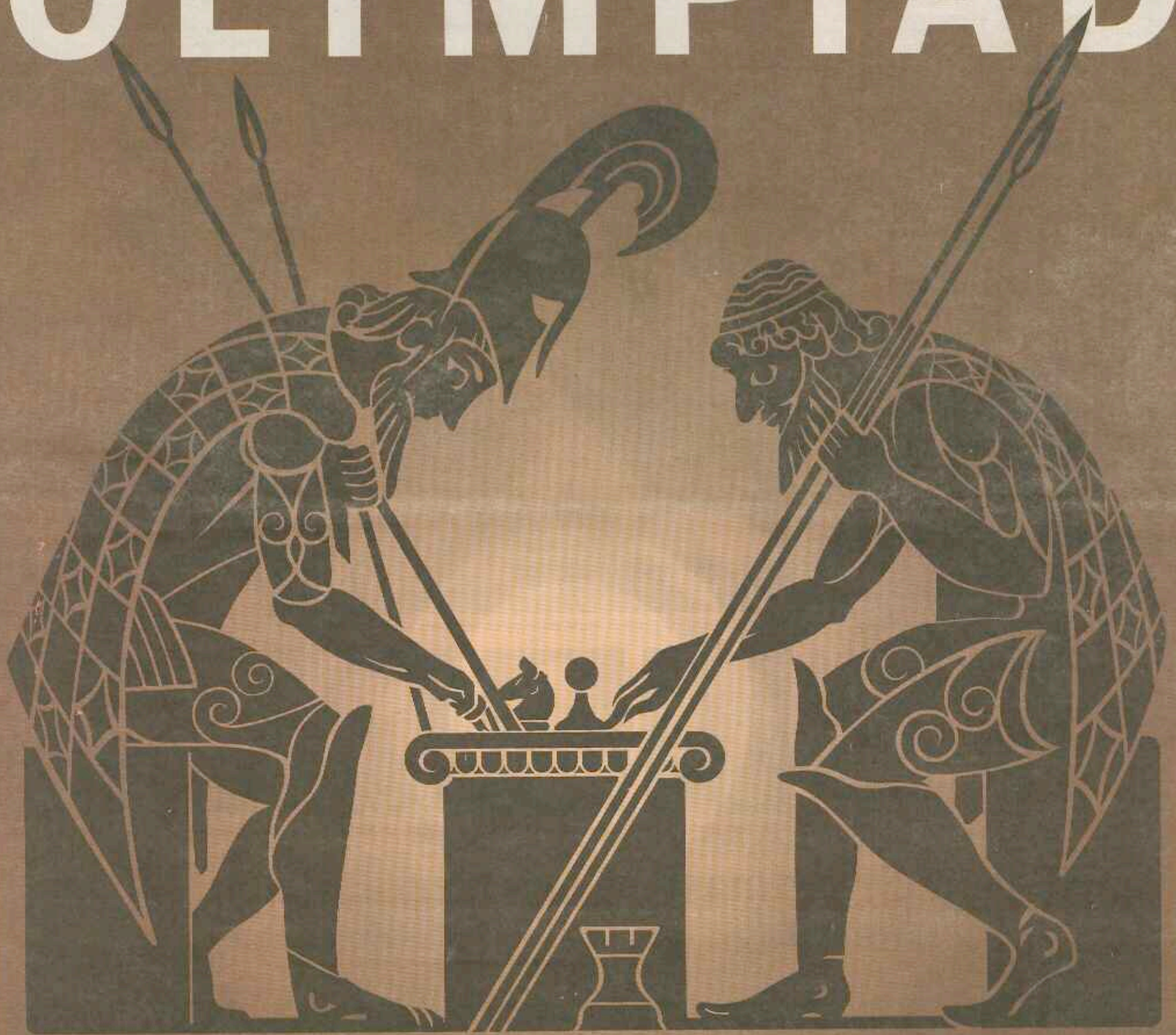


MIND SPORTS OLYMPIAD



ROYAL FESTIVAL HALL, LONDON FROM AUGUST 18 - 24

- BOARD AND CARD GAMES
- MENTAL SKILLS AND PUZZLES
- THE TIMES CROSSWORD CHAMPIONSHIP

£100,000

TO BE
WON
WITH



Skandia

2 MIND SPORTS OLYMPIAD

Peter Brown introduces a supplement dedicated to the first Mind Sports Olympiad, staged in London next week

The Olympiad of thinking games

Most of us who have played a hand of cards, filled in a crossword, moved counters round a board or toyed with chess or backgammon think of it as relaxation, or fun.

Wrong, say the four enthusiastic organisers of the Mind Sports Olympiad at the Royal Festival Hall next week. Well, partly wrong. It can certainly be fun, but exercising the mind is what we're doing, and that's as good for us as any amount of pole-vaulting.

Exercising the mind keeps it fit and wards off senility. So come along and join in.

But surely an Olympiad is only for champions?

Not this one. All you have to do is learn the rules and pay an entry fee. You could find yourself ranged against Michael Adams, Britain's No 1 chess player; or Zia Mahmood, perhaps the world's best bridge player; or Gantvark, the 10x10 Russian world draughts champion; or any of the other entrants (well over a thousand so far) who are arriving from all over the world. And if you can't make the Festival Hall, you can find an Internet site and join the virtual game.

The driving forces behind this most demotic of Olympiads are grandmaster Raymond Keene, *The Times* chess correspondent; Tony Buzan, poet, lecturer and inventor of mind-mapping; David Levy, chess master and computer scientist; and Don Morris, an entrepreneur specialising in high-profile events. The chairman is Sir Brian Tovey, the former head of GCHQ, the government intelligence agency.

Their success, after years of trying, in getting the Olympiad airborne is due in large part to the beneficence of Skandia, the insurance and financial services group, which has supplied £100,000 in prize money — far more than games festivals can usually provide. Other sponsor-

ship has helped make it the biggest date in the games calendar.

The panel of experts and advisers for the Olympiad includes writers, world champions and major organisers. And, true to its theme, the Olympiad will feature gold, silver and bronze medals and new global rating systems (see below).

The organisers have selected 36 mind sports, including board, card and computer games, mental skills, and social games. Chess, go, bridge and IQ will feature, especially in the new "decamentathlon" category — the "Decathlon of the Mind" — which will be one of the highlights of the week. There is also a Pentamind Championship for those entering five or more events.

Most of the games will be familiar even to British couch potatoes. Some — fanorona or zatre — will not. There will be tests of speed reading and creative thinking, which will monitor the contestants' originality, speed and flexibility. In the memory test the man to beat will be Dominic O'Brien, the world memory champion.

Elsewhere in this supplement, David Pritchard explains how he approached the tricky task of choosing the games. Michael Rich sets out why *The Times* has chosen the Olympiad for its annual Crossword Championship, and other experts explain the lure of their chosen fields.

All playing sessions run four hours, either from 10am to 2pm or from 4pm to 8pm. Entry fees range from £5 to £25.

Finally, there will be simultaneous displays by strong players, an art festival, a "Knowledge Café", exhibitions of game-playing computers, antique chess sets, games workshops, tuition by experts and the facility to play new games. Let the play begin!



Dominic O'Brien is world memory champion and can memorise a shuffled pack of cards in 32.8 seconds



The Olympiad organisers: Tony Buzan, Raymond Keene, David Levy, Don Morris and the chairman, Sir Brian Tovey

Who'll be a Grandmaster Decamentathlete?

GAMES players love to compare themselves against their fellow competitors. However, only in a very few games, for example bridge, memory, chess, go and shogi, has the urge for comparison been formalised into a regularly published system of official ratings and titles.

The Olympiad will encourage and capitalise on this twin drive by awarding and publishing official titles based on performance in the Olympiad and related events, such as the World Memory Championships. For mind sports such as spelling, puzzle solving etc, where no ratings or titles have existed, they have been created. For others, such as draughts, where ratings and titles have been inadequately catalogued, such titles as already exist informally have been sanctioned and their official publication ensured.

A player's rating is calculated on the basis of a percentage score in a

RATINGS AND TITLES

tournament or match and the average rating of opponents in that event. A player who subsequently performs better than expected has his or her rating increased and conversely anyone who performs worse than expected loses rating points. Titles are awarded to players who take the top places in important events and to those who achieve predetermined "norms" in tournaments.

The Mind Sports Olympiad will grade and rank everyone in every discipline who participates directly in the event, as well as those who apply via fax, post or the internet.

One of the main goals will be to attain graded levels, with the ultimate goal of becoming a Grandmaster. Any person becoming a Grandmaster in ten different areas will gain the supreme

accolade of Grandmaster Decamentathlete (GD).

To unify the measurement of mental achievement, each mind sport and mental activity in the Olympiad has been graded. The grades have been set so that a good draughts player has the same rating in draughts as a good bridge player has in bridge, and so on. Further, for the first time, it will be possible to have a rating in such mental activities as mind-mapping and creative thinking.

Grading in the Mind Sports Olympiad skills is initially based on trust. Once an applicant has reached a given skill level in any category, such as memory, a "true witness" — who can be a family member, or a respected or professional member of the community — must observe the skill being performed to the required level, and certify it.

If an applicant already possesses a

recognised qualification, such as one in chess or bridge, a Mind Sports Olympiad equivalent rating and title will be issued automatically. For skill levels involving endurance or persistence over time, only a true witness verification of general continuous assessment will be required.

All MSO participants or applicants via fax, post or the Internet <http://www.mindsports.co.uk> will receive an official certificate of the level achieved. Should false evidence be submitted, all grades previously achieved will be revoked.

MSO ratings and titles in activities which require elaborate testing can be obtained only by submitting qualifications already endorsed by the appropriate organisations, such as the governing national or international federation or association.

RAYMOND KEENE

SWISS SYSTEM

MOST of the tournaments will be organised according to the Swiss system, a pairing method (much used for chess tournaments) in which no one is eliminated. Every player competes from the first round to the last. Players normally meet opponents who have the same scores as themselves and competitors cannot play the same opponent more than once.

The number of rounds needed to provide an accurate result is very much smaller than the number of players. For example, a 13-round tournament will usually provide accurate results for the top place, even if there are 8,000 competitors.



The oldest game?

A Greek vase, 2,500 years old, has been adopted — and adapted — as the motif of the Mind Sports Olympiad. In this version, Ajax and Achilles are playing chess. In the original the game appears to be a form of backgammon, though a draughts player would demur.

The earliest writings of ancient civilisations refer to games similar in concept to tic-tac-toe

Arguments still
rage about
the origins of
mind sports

(noughts and crosses). Something like draughts was played in ancient Egypt and Go was referred to in Chinese texts of

about 1000BC as a game any reader would know.

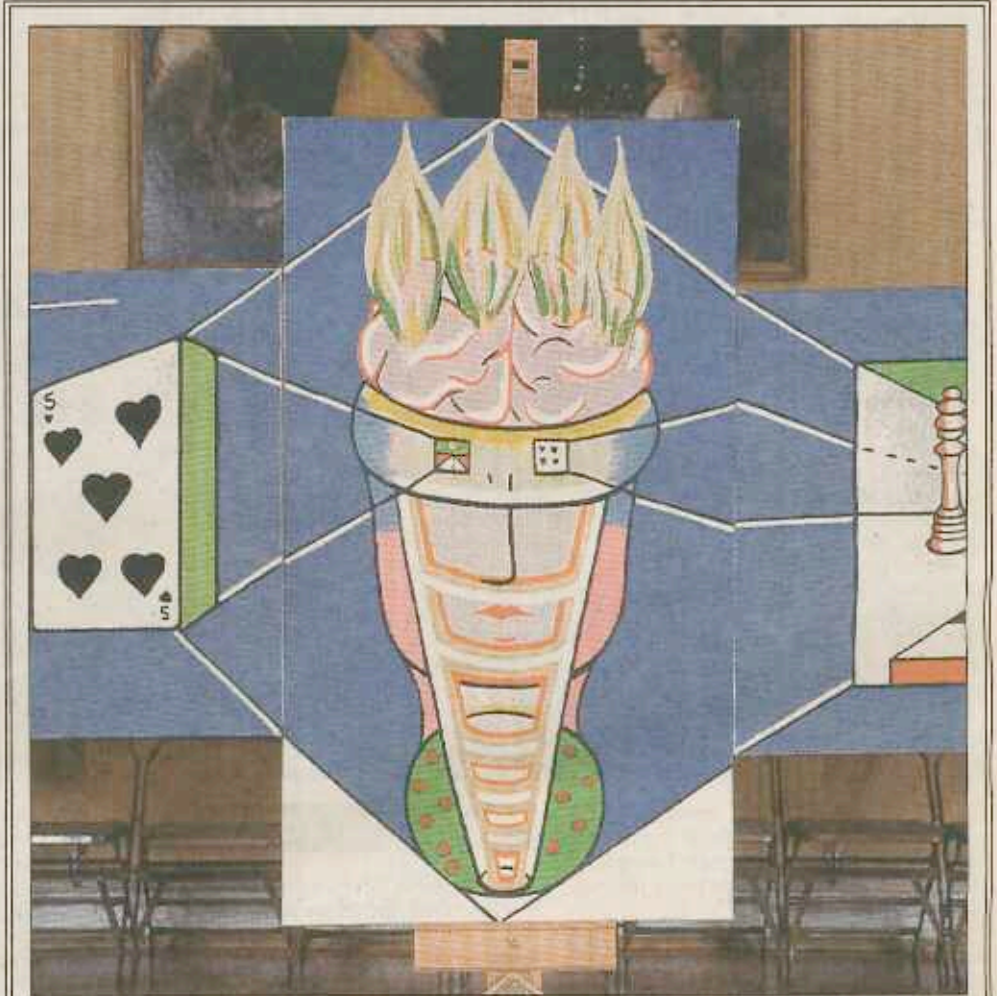
Chess is said to have originated in India around AD600 under the name "chaturanga", a word describing the four traditional army units of Indian military forces: foot soldiers (pawns), cavalry (knights), chariots (rooks) and elephants (today's bishops).

Since the 1970s, however, more and more weight has been given to the idea that China already had a version of chess before India. There were mentions of xiangqi (Chinese chess) in documents during the Warring States period (403-221BC).

Confucius is said to have known Go. To Plato, games were a vital part of a leader's training. Board games have been portrayed by artists through the centuries, from ancient Greece and Rome to the illuminated manuscripts of medieval monks and the modern art of Ernst and Duchamp. To all of them, the games had a mystical significance.

These ancient games now take their part in the Olympiad alongside modern inventions such as Magic: the Gathering. Old or new, however, they share one element: the power to hone the mind.

RAYMOND KEENE



Intellect Igknighed, a triptych in oil, commissioned especially for the Olympiad, by the Australian artist Lorraine Gill, now living in Marlow, Buckinghamshire

HOW HIGH IS YOUR IQ?

THESE QUESTIONS allow you to compare your IQ with that of Garry Kasparov, world chess champion. They are based on a test he took.

1. Which is the odd one out?
Salmon, whale, shark, trout, pike.
2. Insert the two missing numbers:
6 9 18 21 42 45 ?? ??
3. Which is the odd one out?
Venus, Saturn, Hermes, Pluto, Uranus.

4. Choose the word to complete the sentence:
Hearing is to acoustics as seeing is to ??????

5. Complete the row of numbers:
3 5 8 13 22 ??

6. Who is the odd one out?
Haydn, Mahler, Aristotle, Brahms, Stravinsky.

7. Which is the odd one out?
Paris, Washington, Oslo, Cairo, Bombay, Rio de Janeiro, Berlin
8. Which is the odd number out?
625, 361, 256, 197, 144
9. Insert the missing letter:
B E ? Q Z
10. Complete the following number sequence:
4 6 9 13
7 10 15 ??

Answers: page 15

Other IQ questions: page 11

• This test and other material in this supplement is taken from *Buzan's Book of Mental World Records* by Tony Buzan and Raymond Keene (£4.99), published by Buzan Centres and distributed by BBC Worldwide Books. Available from good bookshops.

The Future as an Asset



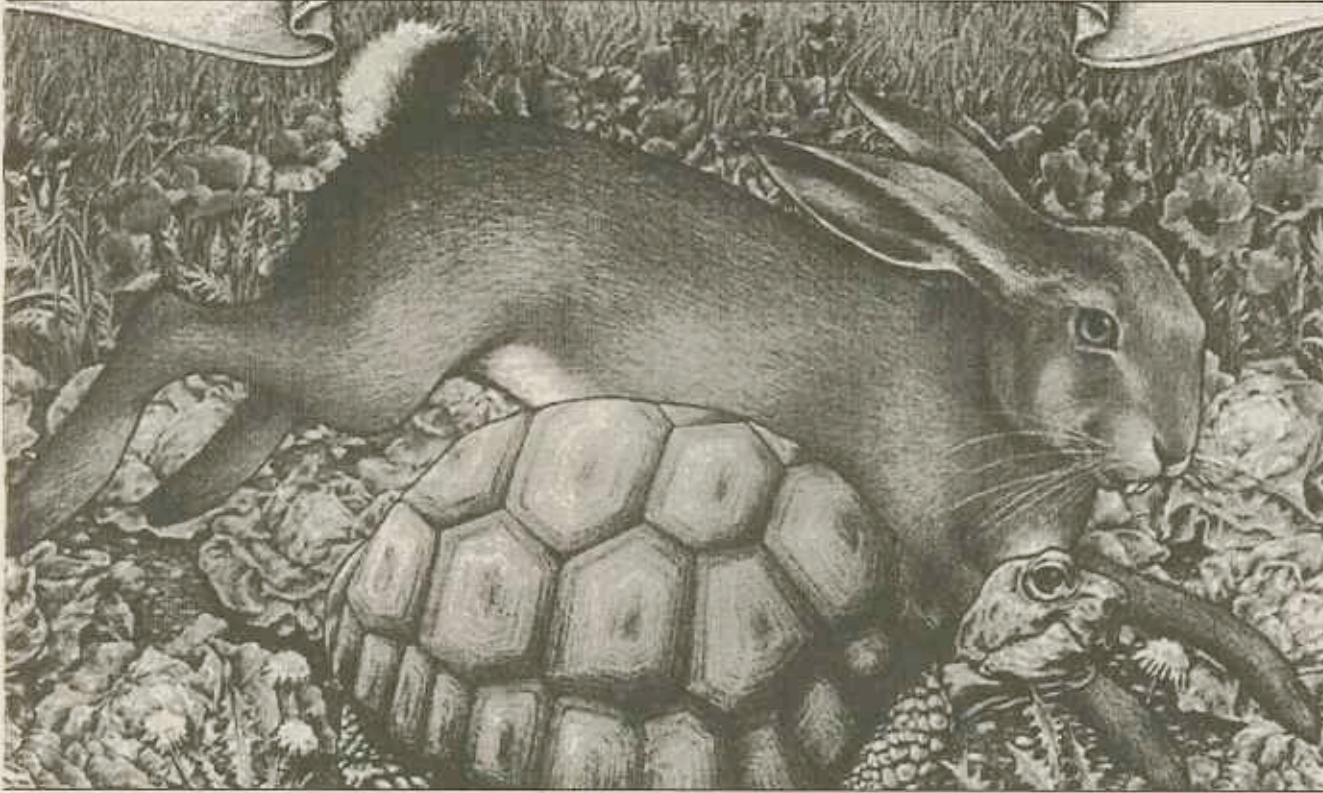
Skandia is an international insurance and financial services group with a home market in the Nordic countries. The group offers a broad range of direct insurance, reinsurance and savings products for individuals and businesses. Skandia has approximately 9,400 employees in 25 countries around the globe.

Premiums written for Skandia totalled MGBP 5,121 (MSEK 58,791) in 1996.

New methods and systems require new knowledge. To secure our own future we must continually acquire new knowledge. Since 1994, in special supplements to its financial reports, Skandia has been reporting on the hidden assets that exist in knowledge-based companies.

In the UK Skandia is represented by Skandia Life.

4 MIND SPORTS OLYMPIAD



HARE and Tortoise is a strategic board game based on the Aesop fable of the hare who lost a race with a tortoise because of over-confidence. It suits two to six players, but is ideal for four.

Invented by David Parlett, it was first marketed by Intellect Games (1947) and subsequently by Waddingtons (1981) and H.P. Gibson & Sons (1988), but it is currently not in production in the UK.

HARE AND TORTOISE

Marketed in Germany by Ravensburger as *Hase und Igel* (Hare and Hedgehog) — based on the Grimms' adaptation of the fable in which the hedgehog wins by guile — it won the very first *Spiel des Jahres* (Game of the Year) award in 1979 and has since won many international accolades. It

has been a European best-seller since 1979; the German edition alone has sold three million copies.

Hare and Tortoise is a simple race game, with the unique feature that players move as many spaces as they like but in doing so use up energy in the form of carrots, which must be replaced.

Various other subtleties combine to make it a highly skilful game.

Our choice of games

The choice of board and table games for the Mind Sports Olympiad will surely raise a few eyebrows. Why, for example, has your favourite game been omitted when several games you have never heard of have been included?

Selection, as you might expect, was not easy. Hundreds of qualifying games were eligible for inclusion, and it will come as no surprise to anybody that many attempts, mostly honourably motivated, were made to influence our choice.

A mandatory requirement, of course, was that every event should represent a challenge to the mind. That effectively ruled out all those delightful social games in which the element of chance looms large ("roll a 6, have another turn").

Games can be classified in a number of ways, none wholly satisfactory. A basic division is into thematic and abstract games. The former are those that stimulate, however inadequately, real life or a creation of the imagination (such as alien civilisations). Abstract games, on the other hand, are, well, abstractions. Draughts is an example of a well-known abstract game.

Thematic games are designed to entertain. They are multi-player games where the pleasure lies in the playing rather than in the winning. Because they tend to cater for most ages, the luck element is usually high to give all players more or less equal chances of winning.

There are only two, arguably three, thematic games in the

David Pritchard, the Olympiad's games director, explains his rationale when it came to selection

Olympiad. The modern craze for trading-card games is represented by *Magic: the Gathering*, the seminal game, way out in front of its rivals, and Hare and Tortoise, a deceptively simple race game in which the players actually choose how fast they move. Both games are highly skilful, unusual for thematic games.

The third game is Stratego, a simple combat game developed from an earlier game, *L'Attaque*, a favourite with our forebears. Stratego and the abstract Othello (a slightly modified version of another early game, *Reversi*) have the joint distinction of being the oldest commercial games in the Olympiad, both with origins dating back to the last century, and both flourishing today.

Abstract games, unlike thematic games, are more about competition than entertainment. They tend to be head-to-head, two-player contests where the sole object is to win. Most abstract games have no chance element and therefore afford no excuse for the loser. They are essentially "mind" games, so it is not surprising that they dominate the Olympiad.

A few events were natural selections — bridge and chess, for example, were automatic choices. The true selection process followed. As games director, I was responsible for recom-

mending the games to be played. The board subsequently accepted my recommendations and later added four additional games.

I started the selection process by defining certain criteria that I considered desirable. Obviously, the first consideration was that a game should be a "mind" game, compatible with the declared aims of the Olympiad. To attract players, it was necessary, too, that a game should be widely known (never heard of *Continuo*? — more than four million sets have been sold).

Another factor was control — an event had to be easy to stage and manage. With handsome prizes at stake, timing of moves was necessary. And, lastly, there was a need for variety so that a wide range of mental skills could be exercised. No distinction was to be made between traditional and commercial games; all were to be considered on their merits alone.

I then wrote to uncommitted games journalists and leading players round the world inviting their suggestions based on the above criteria. The response was gratifying, with lists coming in from as far apart as Argentina and New Zealand.

There was no uniformity in

the replies, but when the lists were consolidated, a number of games stood out clearly as popular choices. With most events now established, it was left to me personally to select the final few. At that stage, variety became the main consideration.

What of the games necessarily omitted? Regrettably, a thematic game that has become a modern classic — *Diplomacy* — had to be left out, in part because the game is very time-consuming, ideally requires six contestants, and is inclined to favour certain players (or, rather, the imperial powers that those players represent), so that a balanced number of games would have to be played to ensure an equal contest.

Other games that came close to being included were *Epanimondas*, *Focus*, *Game of the Amazons*, *Hex*, *Lasca*, *Renju* (a sophisticated version of *Go*-moku or *Five-in-a-row*) and *Trax*, all abstract games; and one new thematic game, *Settlers of Catan*, first marketed in Germany, where it has acquired a cult following.

The selection of games for next year's Olympiad will be subject to an additional check: the degree to which games were supported this time. Events attracting few entries will be vulnerable to replacement. The chances are that next August will see at least a few new board and table games on the entry form — and your choice may be among them.

• The author is editor of *The Encyclopaedia of Chess Variants* (£21.99). Orderline: 0941 112729.

A fantasy in the tradition of Tolkien

MAGIC: THE GATHERING

WHEN I presented my "Magic: the Gathering" invitation card to the two jesters juggling outside a wine bar in Notting Hill, and squeezed my way into the darkened rooms, I wasn't sure what kind of crowd to expect. I thought it might be largely male, aged 20, wearing spectacles and being thoughtful.

Instead, it was loud, unisex, and of indeterminate age and sobriety. They were all drinking green frog's spittle (curaçao, vodka etc), eating toad flax (garlic bread) and being surprisingly normal.

The event was the launch of *Portal*, a starter pack (£6.75) designed to tempt unsuspecting mortals into *Magic: the Gathering*. This is a two-player fantasy trading-card game, invented in 1993 and thus the newest game at the Mind Sports Olympiad, though it has already sold in millions. It is marketed by *Wizards of the Coast*, a company that has recently swallowed the equally well-known *Dungeons and Dragons*.

Handsomely illustrated, magic cards are basically of two types: land (forest, swamp etc) and wizardry (creatures, spells, artefacts). There are thousands of different cards. Collectors will already pay megabucks for rarities. The name of the legendary *Black Lotus* is whispered in corners.

Players have their own, unique, packs, which they arrange before play. Cards are then turned over in sequence and acted upon. A player starts with 20 lives and the object is to reduce the opponent to zero lives.

All this and more I learnt from "Wizard" Sharon Reid, UK marketing manager, and Hans Denneboom, European vice-president. "Between 25,000 and 30,000 play the game in the UK," said Sharon, "and 3,500 of them belong to the DCI — please don't ask why it's called that

— which co-ordinates activities. About 30,000 tournaments are held each year around the world."

Why *Magic*, rather than bridge or backgammon? "Strong visual appeal," said Hans. "And flavoured texts."

"Flavoured" is a *Magic* word. The ethos is familiar to those of the Tolkien generation: classical myth, hobbitry, science fiction, elves and orcs. What's your favourite card? I asked the bewitching Sharon. "I like the *Enormous Growth*," she said. "It's an oversized rat."

At a table nearby, while others guzzled, I was glad to see Christopher Manners and Tony Dobson taking the game seriously. They were playing by candlelight.

"It's the fantasy element which is fun," said Christopher, 19, a chemistry undergraduate at Pembroke College, Oxford, and ranked top overall seed at the recent national championships. "That and the fact that if you're going to beat someone, you do it by making your own deck. There is an element of luck, but it's mainly in the shuffling of the cards."

Tony, a 20-year-old deal-maker, met Christopher through *Magic* two years ago. "It is a very addictive game," he agreed. "But if you're good, you could win about £60 worth of boosters at a tournament here. In America there are people making their living on the *Magic* circuit."

Feeling slightly spellbound — frog's spittle has that effect — I left the *Gathering*. But I may see them all again, playing at the Olympiad.

"I'll probably be there," said Christopher. "And my mum's certainly going. Mind you, she's a bridge player."

PETER BROWN
DAN FRAZIER



The Jester's Cap, a card from *Magic: the Gathering*



Garry Kasparov is the best player of all time, but his self-confidence may prove to be his undoing, writes **Tony Buzan**

Mind versus machine

Just how great is Garry Kasparov? His vision of himself as world champion and his commitment not only to remain so, but also to accelerate away from his rivals, appears nearly absolute. Despite his distaste for losing, he is courageous enough to take risks, to explore new creative variations and to learn from his mistakes. Renowned for his mental literacy, including a phenomenal memory, laser-like analysis and extraordinary imagination, he described his approach: "From the very beginning of a game, I strive to make it as sharp as possible and to take it outside the familiar patterns."

His knowledge of the game is becoming legendary, and his mastermind group includes not only many of the world's best chess coaches, but also a vast computer databank of tens of thousands of games and positional analyses.

In his attitude towards himself and his abilities in the game he exudes self-confidence, but this is the one area where his opponents see possible signs of weakness: he may fall into the trap of thinking he is invincible, and thus will neither prepare nor stay in physical and mental shape. Time will tell.

Kasparov's love of the game extends well beyond the competitive chessboard. Believing, with Goethe, that chess is "the touchstone of the intellect", Kasparov has supported initia-

CHESS

tives in schools, in the belief that the playing of chess by children develops all their cortical skills, as well as encouraging social interaction, promulgating teamwork and co-operation, and teaching them the value of friendly competition and of learning from both mistakes and successes.

Kasparov's energy and persistence are similarly extraordinary. Meeting him is often described as "like having your hand put into a socket and having all your lights turned on." His persistence was demonstrated in his first World Championship match against Anatoly Karpov, when he came back from five games down. Over three months of the highest level of combat (indeed, he describes chess as "an art, a science

and a sport"), he ground down the world's third-ranked player of all time to such an extent that both mentally and physically, Karpov was incapable of continuing.

To succeed continually at this level, Kasparov has to be superbly fit physically. Only aerobic fitness can provide what is needed when considering the hundreds of variations on the 52nd move of the 23rd game in a two-month-long conflict that will decide the future of the thinker's life.

'I strive to make a game as sharp as possible'



Harriet Hunt, aged 19, recently scored a spectacular British chess victory in Poland, where she beat 60 others to become the World Girls' Under-20 Champion. Harriet, who learnt chess from her father, starts a degree course in natural sciences this autumn.

ADAM NADEL



Kasparov v Deep Blue: extraordinary energy and persistence

TOP 10 ALL-TIME CHESS RANKINGS

Rank	Player (country)	Fide rating	Dates
1	Garry Kasparov (Russia)	2815	1963-
2	Bobby Fischer (USA)	2785	1943-
3=	Anatoly Karpov (Russia)	2775	1951-
3=	Vladimir Kramnik (Russia)	2775	1975-
5	Viswanathan Anand (India)	2765	1969-
6	Veselin Topalov (Bulgaria)	2750	1975-
7	Gata Kamsky (USA)	2745	1974-
8	Vassily Ivanchuk (Ukraine)	2740	1969-
9	José Capablanca (Cuba)	2725	1888-1942
10+	Mikhail Botvinnik (USSR)	2720	1911-1995
10=	Emanuel Lasker (Germany)	2720	1868-1941

The highest-rated female of all-time is the Hungarian player Judit Polgár, with a rating of 2675 in 1996, thus making her overall world number ten at that time.

In the Sixties, over a competition weekend (2½ days) one player, by playing between six and nine hours of chess per day, lost more than 5lb of his body weight. During the 1984-85 match against Garry Kasparov, which lasted five months, Anatoly Karpov lost 20lb.

Most Invincible Player

José Raul Capablanca, who lost 34 games out of 571 between 1909 and 1939. He was unbeaten for 63 master and grandmaster matches, including a World Championship, from 1916 to 1924.

Consecutive Marathon World Record

Master player Graham Burgess took 72 hours from May 18 until May 21, 1994, at the London Chess Centre, Euston, to win 431 games, draw 25 and lose 54, for an 87 per cent score against opposition rated 1855 on average.

Blindfold World Record

On February 1, 1925, in Paris, Alexander Alekhine played 28 boards simultaneously blindfold, scoring 22 wins, three losses and three draws.

Although later players have slightly surpassed Alekhine's total, his opponents, of national master strength, are regarded as having provided the greatest standard of opposition for such an exhibition.

Harry Nelson Pillsbury, the American grandmaster (1872-1906) regularly played 12 games of chess and six games of draughts at the same time, without sight of the boards, while simultaneously playing one hand of (sighted) whist. Before one such display he also memorised 30 strange words, which he was able to recall forwards and backwards at the end.

Deep Blue — world's best player?

IN May 1997, the world chess champion, Garry Kasparov, played a six-game challenge match against the IBM super-computer Deep Blue. The machine was able to calculate an incredible world-record number of 200 million different positions every second. Kasparov won the first game; Deep Blue won the second; the next three were drawn; and Deep Blue won the decider.

In losing to Deep Blue, Garry Kasparov became the first human world chess champion to be defeated by a computer in a full contest and, just possibly, the last world champion to be human at all. With Kasparov most unlikely to scuttle off into the wastelands of history, will Deep Blue's victory usher in a new dawn of global fascination

with chess and mind sports in general?

One obvious spin-off, and one much to IBM's advantage, would be to create a version of the Deep Blue program for use on personal computers, and launch it on the world market. With IBM having generated several hundred million dollars worth of publicity from the match, the company is uniquely placed to reap a rich commercial harvest from the intellectual capital it has so successfully and spectacularly nurtured with its Deep Blue project.

A further boon, to both the advancement of science and the international chess community, would be for IBM actively to enter Deep Blue into competition against other elite grandmasters. If IBM is shy of

taking on further challenges, then chess players and enthusiasts should lobby the company at www.chess.ibm.com.

Is Deep Blue now, in fact, the world's strongest chess player, or was the sensational outcome of the match caused mainly by Kasparov's poor psychological preparation? (The Indian grandmaster Viswanathan Anand, for example, in the German magazine *Der Spiegel*, accused Kasparov of treating the machine "like God".)

One infallible way of determining this would be for Kasparov to challenge Deep Blue to a 20-game match, with nothing less than his world title at stake.

This would be a gauntlet that IBM dare not leave lying without exposing itself to charges of cowardice. It would

be tragic if Deep Blue were to repeat the behaviour of the last "American" player who won a match against the world champion: after 1972, Bobby Fischer did not play in public for 20 years.

Finally, amid all this talk of "man versus machine" we must remember at all times that Deep Blue's victory is also a triumph for the human brain. Deep Blue does not come from a machine planet — it is the product of scientists and grandmasters. Over the chessboard, these individuals may not be equal to the colossus they have toppled, but their collective intellectual achievement will go down in the record books of superlative human firsts.

RAYMOND KEENE

MIND SPORTS OLYMPIAD

Gripped by the grid

It is a matter of history that the first crossword puzzle appeared in *New York World* in 1913. Little can Arthur Wayne have known what he had spawned. Nowadays no newspaper or magazine seems to be complete without at least one puzzle, often two (one cryptic, one definitional) and sometimes an additional one of a general knowledge variety.

So, what is it about crosswords? Well, for starters, I think it is the fact that they can be done alone, and they can be done in short stretches of time, to be picked up again later if unfinished. You cannot just say halfway through a game of bridge: "Let's take a break and come back to it later." If you pick up a crossword you can do just that.

From personal experience I know the brain is working away subconsciously while other things are going on — I have even woken after a brief snooze and immediately entered another answer without looking back to the relevant clue.

Crossword puzzles are, therefore, ideal stimulation for those who have neither the time nor the inclination to devote long periods to the playing of games. They are also ideal for those content to measuring their own achievements without reference to others.

There is an enormous buzz factor to the first time you complete a *Times* crossword

Michael Rich explains the pull of the puzzle

CROSSWORDS

puzzle. There is also an underlying slight sense of smugness in having beaten the setter. But he or she will be back tomorrow and so will you, when the battle can recommence.

Some people will merely try to do it every time, faster and faster. Others will move on to yet more difficult puzzles, perhaps culminating in an attempt to do The Listener series which appears in the Weekend section of the *Saturday Times*.

Finally, of course, you can get very competitive about it all, and that's where *The Times* National Crossword Competition comes in, on Sunday August 24 at the Mind Games Olympiad. Many readers will have seen the qualifying puzzle which appeared in *The Times* on July 19, a puzzle designed to be sufficiently difficult to reduce those with competitive instincts to manageable proportions.

Just 150 competitors submitted correct solutions to this puzzle, out of the total of three hundred plus who will be coming to the final, and out of

the total of 448 who submitted an entry — regrettably space considerations mean we cannot accommodate everybody.

Incidentally, the clue that floored almost every incorrect solver was:

Omniscient mastermind? (6)

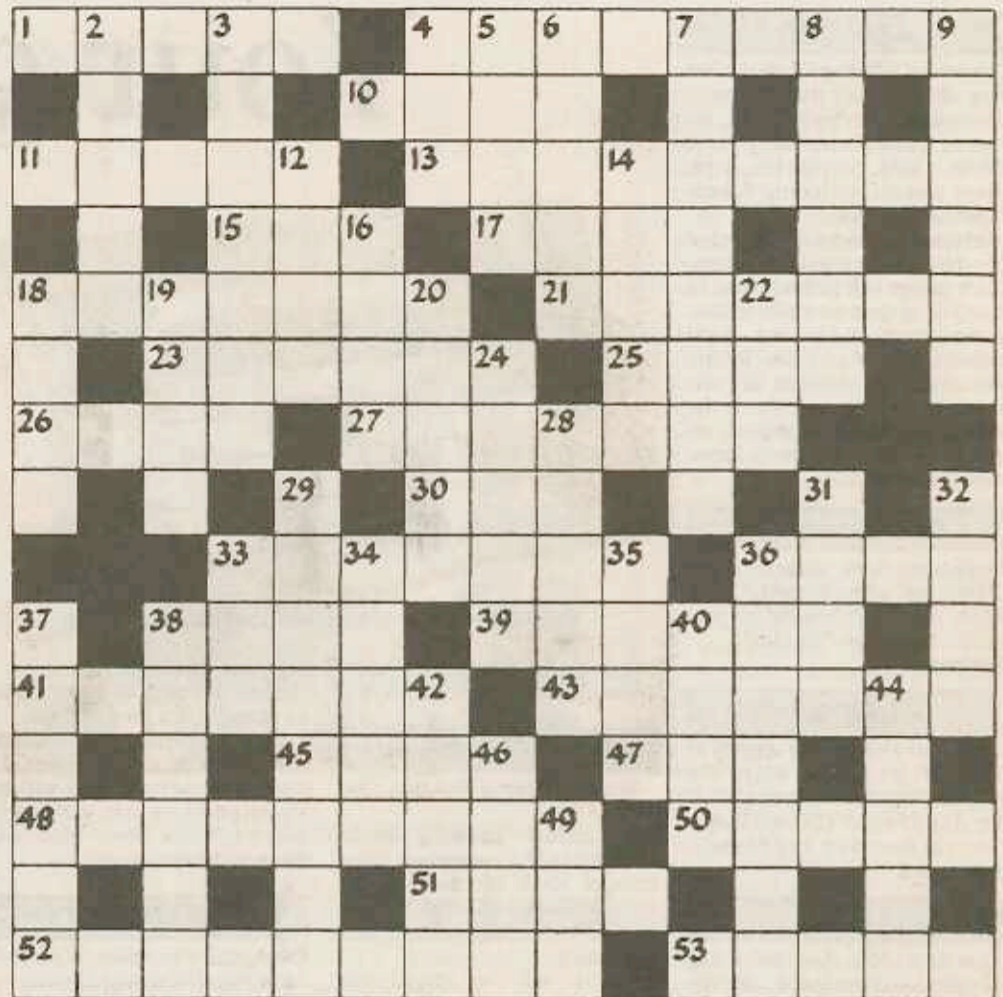
Given that you had a probable .O.E.T would you have come up with JOWETT? I refer you to a verse quoted in the *Oxford Dictionary of Quotations* per H.C. Beeching:

*First come I; my name is Jowett,
There's no knowledge but I know it.
I am Master of this college;
What I don't know isn't knowledge.*

Whether this clue would have foxed those who filled in the very first *Times* Crossword of December 21, 1930, I cannot tell. For comparison, it is reproduced on this page.

At the Olympiad the competitors will be measuring themselves against their fellows, initially in terms of accuracy — it is unusual for more than 50 per cent of even the best competitors to complete a puzzle in less than the allotted half hour — and then in terms of time, with bonus points given for quick accurate completion. For most competitors the Olympiad spirit of taking part, not just winning, is uppermost.

I have been running *The Times* Crossword Competition



CROSSWORD NUMBER ONE

ACROSS

- 1 Spread unevenly
- 4 Part of a Milton title
- 10 A month, nothing more, in Ireland
- 11 He won't settle down
- 13 22 down should be this
- 15 Cotton onto, so to speak
- 17 Head of a chapter
- 18 Denizen of the ultimate ditch
- 21 Frequently under observation
- 23 What's in this stands out
- 25 Flighty word
- 26 If the end of this gets in the way the whole may result
- 27 Retunes (anag.)
- 30 This means study
- 33 Simply enormous
- 36 There's a lot in this voice
- 38 This elephant has lost his head
- 39 A turn for the worse
- 41 Done with a coarse file
- 43 Red loam (anag.)
- 45 This rodent's going back
- 47 Makes a plaything with its past
- 48 Wants confidence
- 50 A mixed welcome means getting the bird
- 51 This girl seems to be eating backwards
- 52 The men in the moon
- 53 A pinch of sand will make it dry

DOWN

- 2 Heraldic gold between mother and me
- 3 Out of countenance
- 4 Upset this value and get a sharp reproof
- 5 Intently watched
- 6 In some hands the thing becomes trumpets
- 7 A religious service
- 8 This horseman has dropped an h
- 9 Sounds like a curious song
- 12 This ought to be square
- 14 Momentary stoppage
- 16 Written briefly
- 18 Calverley's picturesque scholars carved their

- 19 Site of 45 across
- 20 Precedes advantage
- 22 Parents in a negative way
- 24 Used to be somewhere in France
- 28 Happen afterwards
- 29 Climbing instinct in man
- 31 A terrestrial glider
- 32 The final crack
- 33 The little devil's on our money
- 34 Simplest creature
- 35 Time measurements
- 36 Jollier than 4 across
- 37 Ladies in promising mood
- 38 Presents are commonly this
- 40 Gets the boot
- 42 Hail in Scotland may mean tears
- 44 Works, but usually plays
- 46 She's dead
- 49 Only a contortionist could do this on a chair

Answers on page 15

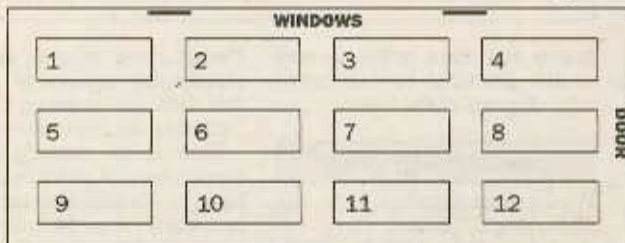
THIS CROSSWORD was the first one to appear in *The Times*, on December 21, 1930. It appeared in the Weekly Edition, which was regularly used as a method of testing new ideas before introducing them to the daily paper. The bridge column began in the same way.

Two weeks later Lieut-Commander A.C. Powell, RN, of Southsea, wrote to the Editor suggesting that puzzles should be reprinted in the daily editions. Further letters followed and the first daily crossword appeared on February 1.

Almost two years later the first book of *Times* puzzles was published, and by April 22, 1933 the crossword was sufficiently established for the 1,000th puzzle to be marked by a leading article. It moved to the back page in June 1947.

The first Crossword Championship was held in August 1970 and was won by Mr C.R. Dean, of Bromley, Kent. In the same year the first Christmas jumbo crossword was published.

Take the tough puzzle challenge



PLAN OF ACTION

AN Olympiad is being held with tables set up for each game as shown in the floor plan. From the following information can you deduce where each game is played?

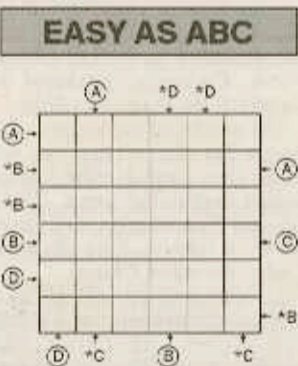
The IQ competition is not held in the row of tables nearest the windows, and Scrabble is not played in the row furthest from the windows. Draughts is played in a column nearer the door than Stratego. The Chess and Crossword tables are not adjacent in any direction, including diagonally, and the latter having the higher number. The Mah-Jongg table is diagonally adjacent to the Othello table, which is in the middle row. Go is played in a

corner. Bridge is played at a table numbered 4 higher than that of the Backgammon table, which is diagonally adjacent to the Rummikub and Draughts tables, both of which have lower numbers. The Bridge and Mah-Jongg tables have consecutive numbers, as have the Scrabble and Stratego tables. The Crossword and IQ Competition table numbers together equal the combined total of the Go and Scrabble table numbers. The IQ Competition is held immediately above the Mah-Jongg table, and Othello is played immediately below the Scrabble table. The Chess table is numbered 5 less than that of the IQ Competition.

EACH row and column in this grid originally contained one A, one B, one C, one D and two blank squares, though not necessarily in that order.

Each starred letter refers to the first of the four letters encountered when travelling in the direction of the arrow. Each circled letter refers to the second of the four letters encountered in the direction of the arrow.

Can you complete the original grid?



LATIN SQUARE

THE grid is to be filled in with the numbers from 1 to 6 so that each number appears exactly once in each row and column. The clues refer to the digit totals in the squares mentioned. For example, DEF2 = 9 would mean that the numbers in D2, E2 and F2 add up to 9.

- A234 = 9
- AB1 = 6
- B45 = 6
- BC2 = 7
- CD3 = 9
- C56 = 11
- DEF6 = 8



- E45 = 4
- EF3 = 6
- F234 = 6

Answers: Page 15

8 MIND SPORTS OLYMPIAD

ABALONE

Olympiad Championship: Tue Aug 19 (am); Wed Aug 20 (am)
Two-player strategy game invented by M. Lalot and L. Levi c1988. Sold worldwide with many awards, including French Game of the Year.

Hexagonal board composed of 61 cells in a regular pattern. Each player (white/black) has 14 marbles in their own colour. You move (push) your own men, either singly or as a line, in any direction. The object is to push your opponent's marbles off the board. A line can only push an opponent's line that has a lesser number of marbles.

BACKGAMMON

Beginners: Mon Aug 18 (pm). Olympiad championship: Tue 19-Fri 22 (pm); Weekend tournament: Aug 23 and 24 (day). See page 12

BRIDGE

Duplicate Pairs: Mon Aug 18 to Thur 21 (pm). Swiss Pairs: Fri Aug 22 (pm). Swiss teams of four: Sat Aug 23 (day). Championship teams of four: Sun Aug 24 (day). See page 6

CHESS

30-minute: Mon Aug 18-Fri Aug 22 (am). Ten-minute tournaments: 1st, Sat Aug 23 (pm), 2nd, Sun Aug 24 (am). Five-minute tournaments: 1st, Aug 23 (am), 2nd, Aug 24 (pm). Primary schools Terafinal and Challengers: Sat Aug 23 (day). Problem solving: Sat Aug 23 (pm). Concorde prize. See page 5

COMPUTER PROGRAMMING

Sponsored by ICL/Fujitsu. World championship: Sat Aug 23, Sun Aug 24. See page 15

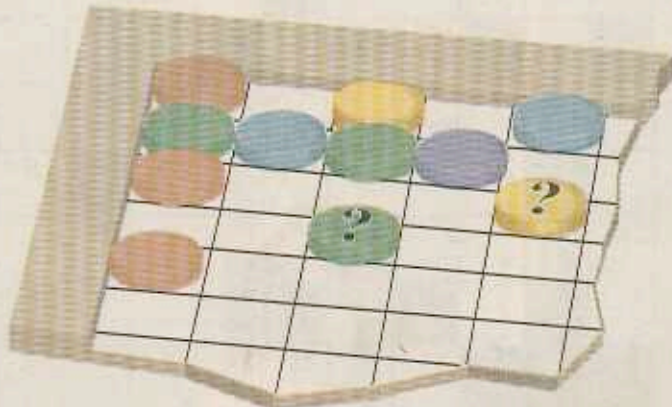
CONTINUO

World Championship Sun Aug 24 (day)
Continuo is a pattern-matching tile game, ideally for two players, invented by Maureen Hiron in 1982. Within six weeks of release it was Britain's top-selling game. It has never been advertised but has sold more than 5 million copies in 37 countries. The game consists of 42 square cardboard tiles, each divided into 16 small squares. Each square is of a single colour and a tile may have either two or three different colours. Players draw tiles and lay down one in turn such that it abuts at least one tile already on the table. The winner is the

MIND SPORTS OLYMPIAD

Your guide to all the ga

Don't miss a trick: use this comprehensive program



Entropy is a two-player abstract strategy game

player with the highest score when all tiles have been played.

CREATIVE THINKING

World championships: Sat Aug 23 (am)
The Creative Thinking World Championship comprises three tests of 30-45 minutes. Contestants will be set a variety of tasks involving imagination and originality.

Points will be scored for: Creative Fecundity — the ability to produce a large number of ideas in a limited time; and Pure Originality — coming up with ideas that other people don't consider. The scoring system will, however, reward quality more highly than quantity.

CROSSWORD PUZZLES

The Times Crossword Puzzle Championship: Sat Aug 23 (3pm-6.30pm). See page 7

DECAMENTATHLON

World Championship: Sat Aug 23 (am)
The Decamentathlon is a four-hour challenge in 10 different games and mental skills: bridge, chess, creative thinking, draughts 8x8, Go, IQ, Mastermind, memory skills, mental calculations and Othello.

Each of the 10 games and mental skills will be worth a maximum of 100 points. It is possible to win the Decamentathlon even if you are unable to attempt all ten sections.

The first skill to be tested is memory. The test consists of two parts:

a) memorising a normal deck of 52 playing cards which have

been shuffled; and b) memorising as many digits as possible of a long number.

Each of the other nine sections will consist of a written test. In chess, for example, you will be shown positions from games and asked to write down what you think is the best move.

DRAUGHTS

Olympiad championships, 8x8: Mon Aug 18-Fri Aug 22 (am). Olympiad championships, 10x10: Mon Aug 18-Fri Aug 22 (pm). 8x8 10-minute tournaments: Sat Aug 23 (pm) and Sun Aug 24 (am). 10x10 10-minute tournaments: Sat Aug 23 (am) and Sun Aug 24 (pm). See page 10

ENTROPY

World championship (Hyle, 7x7): Tues Aug 19 and Wed, Aug 20
Two-player abstract strategy game generally considered to be a modern classic. Accorded the rare 6 out of 6 rating by *Games & Puzzles Magazine* games test panel (1981). Invented by Dr Eric Solomon. Marketed in UK by Skirrid International (1980) and subsequently in the US as *Vice Versa*. Currently marketed in Germany by Franjos as *Hyle*.

The marketed game uses a 5x5 board but the version we are using gives a much more sophisticated and skilful game. Board 7x7 and 49 counters, seven each of seven colours. One player is *Order*, the other *Chaos*.

All counters are placed in a bag and are drawn, one at a time and unseen, by *Chaos* who places them on any empty square. Each time a counter is placed, *Order* can move any one

counter on the board, including the one just played, like a rook in chess. The object of *Order* is to form patterns, horizontally and vertically, which *Chaos* strives to prevent.

A pattern is any line of two or more adjacent counters which is identical if the order is reversed.

FANORONA

Olympiad championship: Tue Aug 19 and Wed Aug 20 (pm)
Two-player abstract board game; 22 identical pieces a side. Derived c1680 from the Arab game of Alquerque, Fanorona is the national game of the Malagasy Republic.

A feature is the "vela partie" (debt or punishment game) forced on the loser by the victor, followed by an even more forbidding vela should the loser lose again!

GAMES WORKSHOP

Sponsored by Intelligent Research. Sun Aug 24 (day)
Lectures and simultaneous displays by games experts. The aim is to help people improve their skills and learn more about the games. It will be possible to learn new games in the morning then play competitively in the afternoon.

GIN RUMMY

Olympiad Championships: Sat Aug 23 and Aug 24 (day)
A modern (1940) member of the large rummy family of card games, of which Canasta is one of the best-known, derived partly from the Spanish-American Coon-Can (later Conquian). Gin swept Hollywood and became known as the game of the stars, a notoriety which has ensured its survival.

GO

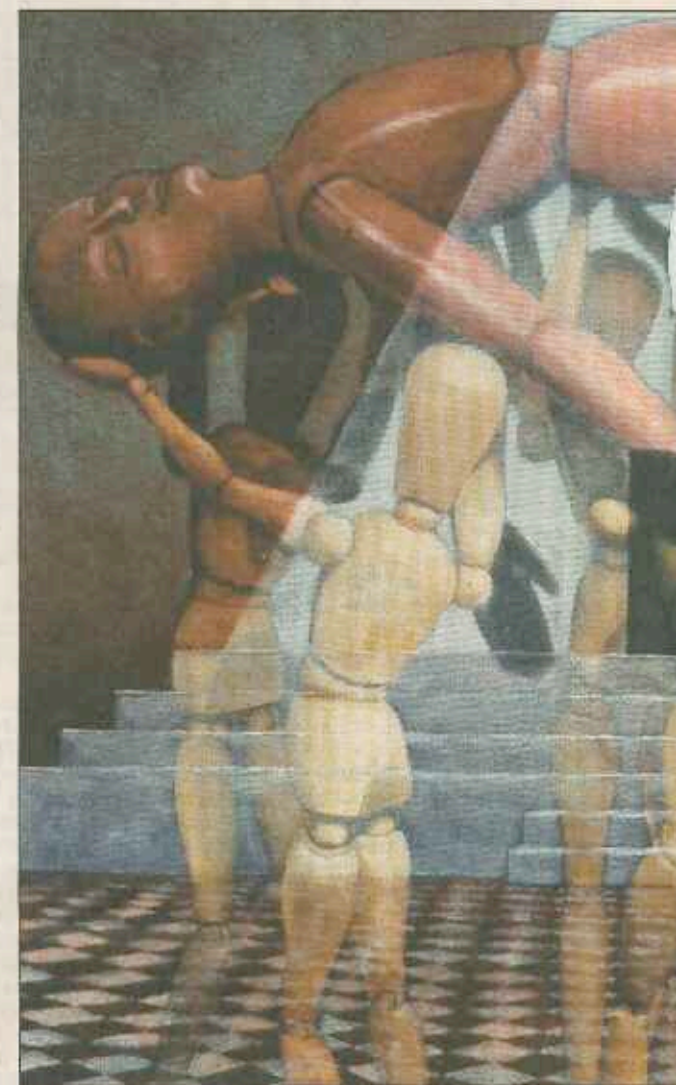
Sponsored by Skandia. 9x9: Sun Aug 24 (pm). 13x13: Mon Aug 18-Fri Aug 22 (pm). 19x19: Olympiad championship: Mon Aug 18-Fri Aug 22 (am). 19x19: Weekend tournament: Sat Aug 23 (day) and Sun Aug 24 (am). See page 13

HARE AND TORTOISE

World Championships: Tue Aug 19 and Wed Aug 20. See page 4

IQ COMPETITION

World Championship: Mon August 18-Fri Aug 22 (pm). First prize includes a return ticket by Concorde from London to New York. One-day tournament: Sat Aug 23 (pm)
The IQ tournaments are being set and marked by Mensa. Participants whose mother tongue is not English can compete for "restricted" medals (and Pentamind points) by participating in all the non-linguistic tests. Anyone trying for the Concorde



Checkmate, by Derek Carruthers, is part of an art exhibition at the Festival Hall, complementing the Mind Sports Olympiad. Other exhibiting artists are: Paul Neagu, Stephen Carter, James Trew, Christopher Hedley-Dent, Gerard Hemsworth, Marcel Duchamp and Barry Martin, the Olympiad's art manager. Mr

tickets and other prizes, as well as the principal medals, must take all parts of the test.

JIGSAW PUZZLES

World championship: Mon Aug 18-Fri Aug 22 (am)
Each day there will be a 500-piece puzzle with four hours allowed for completion. A participant's score is the percentage of pieces in their correct place plus a bonus of 100 if the puzzle is correctly completed. A piece not in its correct place is not counted and three pieces are deducted from the count of the number correctly placed. Completing the whole puzzle scores 200.

LINES OF ACTION

World championship: Tue Aug 19 and Wed Aug 20 (am)
Commonly known as LOA, this is a two-player abstract game invented by Claude Sourcie and first published in Sid Sackson's *A Gamut of Games* (1969). A cult game in America and Europe, it uses an 8x8 draughts board and men (12 a side). The starting position has the pieces arranged around the perimeter with the corners blank and the pieces of like colour facing each other.

MAGIC: THE GATHERING

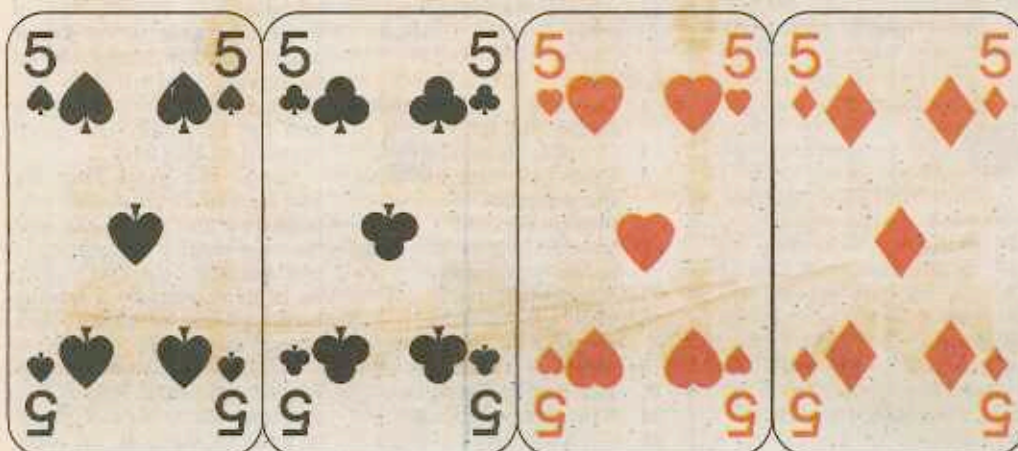
Olympiad championship: Mon Aug 18-Fri Aug 22 (am). See page 4

MAH-JONGG

Olympiad championship (Chinese rules): Sat Aug 23 and Sun Aug 24 (day). See page 13

MASTERMIND

Olympiad championship: Thur Aug 21 and Fri Aug 22 (day). 10-minute tournaments: 1st, Sat Aug 23 (am); 2nd, Aug 24 (pm)



Gin is a recent member of the large rummy family, a favourite with Hollywood film stars

Games and all the action

Time to the Olympiad with the diagram on page 14



Martin says: "I selected the works on the basis that each represents an aspect of board games, whether showing the mechanics; the variety; the human concentration and frustration; or simply the inquisitiveness that strange shapes such as puzzles elicit in us."

Two-player code-breaking game based on the Victorian pencil-and-paper game of Bulls & Cows. Invented by Marco Meirovitz and first marketed by Invicta Plastics a quarter of a century ago, the game has since sold many millions worldwide.

Components are a peg board together with pegs in eight colours. One player, the code-setter, secretly sets a code, left to right, of four colours which may include repeated colours. The second player, the code-breaker, attempts to solve the code by placing four colours in sequence, continuing attempts until the code is broken.

MEMORY SKILLS

Sponsored by Buzan Centres. World championship: Thur Aug 21 and Fri Aug 22 (day). Events include speed memorisation of a shuffled pack of cards; memorisation of several packs, spoken numbers, binary numbers, names and faces.

MENTAL CALCULATIONS

World championship: Sun Aug 24 (am). Test in which the contestants

have to write down only the answer to each question — no intermediate calculations or notes may be written. Calculators are banned. Questions will be graded: the first ones can be answered by most schoolchildren while later ones will be difficult even for the most numerate adults.

OTHELLO

Olympiad Championship: Sun Aug 24 (am). Weekend championship: Aug 23 and 24 (day).

Two-player abstract board game, "perfected" by Goro Hasegawa in 1971, who named it after his favourite Shakespearean character. However, apart from the small rule change, the game is identical with *Reversi*, invented by Lewis Waterman c1880. Waterman was later sued by one John Mollet, who claimed that the game infringed his patent of an earlier (c1870) game called *Annexation*. The "relaunch" of *Reversi* as *Othello* generated a new interest. The British Othello Federation was founded in 1977 and the first British and International Championships were held in that year. Other countries with organisations who have

held national championships are Belgium, Denmark, Finland, France, Germany, Italy, Japan, Norway, Sweden, Switzerland and the US. Board 8x8; there are 64 men, similar to draughtsmen, one side white, the other black. The centre four squares are "dressed" with two pieces of each colour uppermost placed diagonally one to the other. A play consists of placing a man on any empty square with own colour uppermost.

If a piece or pieces of opposite colour are trapped between it and a piece of the same colour, the opponents' men are reversed to create a line of men of the player's colour. There is no capturing. When the board is full, the winner is the player whose colour is in the majority.

OWARI

World team championship: Mon Aug 18-Tue Aug 19 (pm). World individual championship: Wed Aug 20-Fri Aug 22.

Owari ("fours"), also known under a variety of names, is but one of the 200-odd mancala games. It is played by two players using a 12-cup board. The royal game of the Ashantis, it is confined mainly to Ghana and Sierra Leone.

The game starts with four beans or stones in each of the 12 cups. The players face each other with the board lengthways between them. The first player picks up all the stones from any cup on his side of the board and sows them one at a time, anti-clockwise, into succeeding cups.

PENTAMIND

World Championship (sponsored by British Airways). First prize includes a return ticket by Concorde from London to New York.

Anyone taking part in five or more tournaments for different games or mental skills is automatically entered for the Pentamind Championship. No extra time or effort is involved on the part of the participant. If you take part in more than five tournaments, your best scores will be taken. Scoring will be explained at the Olympiad.

RUMMIKUB

Olympiad championship: Mon Aug 18-Thur Aug 21 (am). British championship: Fri Aug 22 (day).

Rummikub is a multi-player tile game based on the card game rummy. Invented, or at least developed, by Ephraim Hertzano, it was first marketed in Israel in the early Fifties and now enjoys a world-wide popularity. It won the German Game of the Year award in 1980. It is probably best with four players.

There are 106 tiles, numbered 1-13, two of each value in four different colours plus two jokers; also racks on which the players stack their hands screened from the other players. The object is to assemble tiles in melds or runs, as in rummy. Exposed tiles can



Othello was perfected by Goro Hasegawa in 1971

be juggled by players in order to accommodate their unwanted tiles. The object is to be the first to dispose of all one's spare tiles.

SCRABBLE

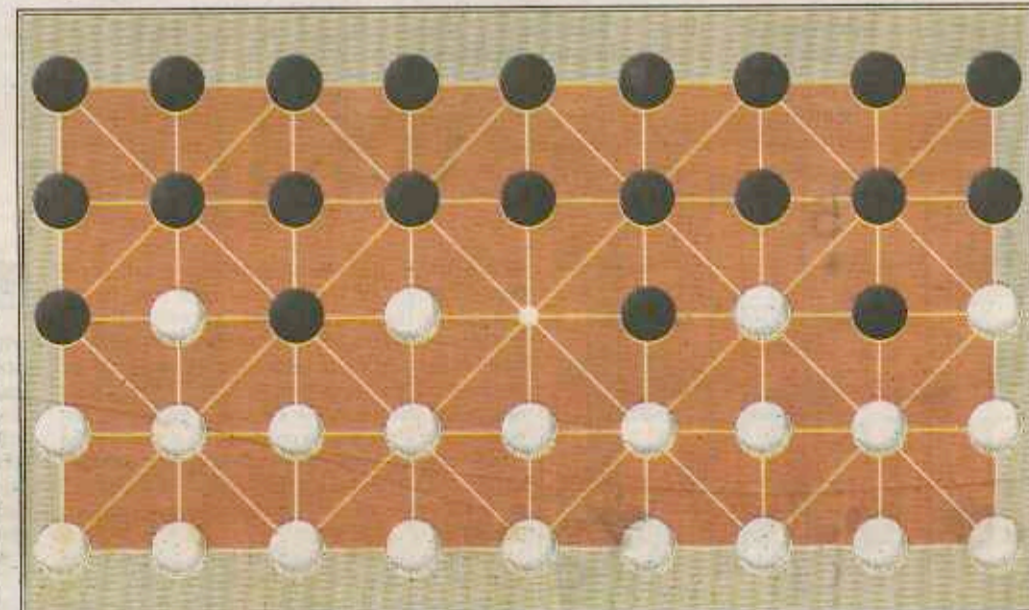
Olympiad Championship: Mon Aug 18-Fri Aug 22 (am). Weekend Tournament: Sat Aug 23 (day) and Sun Aug 24 (day). Concorde prize. See page 10

SHOGI (Japanese Chess)

Sponsored by Skandia. Olympiad championship: Mon Aug 18-Fri Aug 22 (am). 10-minute tournaments: 1st, Sat Aug 23 (pm); 2nd, Sun Aug 24 (am). See page 13

SKAT

Olympiad Championship: Mon Aug 18-Fri Aug 22 (am). A trick-taking game for three players. Skat is Germany's national card game. The rules were first codified in 1886 and the game is now controlled by the Deutscher Skatverband. A 32-card pack is used.



Fanorona is derived from the Arab game of Alquerque, and features a 'punishment' aspect

marketed as *L'attaque* in France towards the end of the last century and by HP Gibson & Sons in UK in the early Twenties. In 1961 it was relaunched in the US as *Stratego* with a slightly enlarged board and added pieces.

As with many proprietary games, different manufacturers hold the licence for the game in different countries.

Board 10x10; 40 men a side. Players set up their forces freely on their own side of the board with the ranks of the pieces concealed from the opponent. Combat is hand-to-hand with the lower-ranked piece eliminated. The object is to capture the opponent's flag which, once placed, cannot be moved.

TWIXT

World championship: Tue Aug 19 and Wed Aug 20 (pm)

Two player path-forming strategy board game of the type pioneered by Piet Hein in the 1940s with *Hex*. Invented by Alex Randolph. First marketed in the US by 3M nearly 30 years ago, the game has never been out of production.

Square board with a regular pattern of holes and pieces in two colours. Players place a peg in turn into an empty hole. Pegs of the same colour that are a (chess) knight's move apart are physically joined. The aim is to form a linked path across the board from one side to the other. Linked pegs cannot be crossed so only one player can win.

XIANGQI (Chinese Chess)

Olympiad Championships: Mon Aug 18-Fri Aug 22 (pm). European championships: Sat Aug 23 (day) and Sun Aug 24 (day). See page 13

ZATRE

Olympiad Championship: Thur Aug 21 and Fri Aug 22 (day)

This modern proprietary board game has attracted an increasing band of enthusiasts in Austria, Germany, Switzerland and elsewhere in Europe. The game is mathematically based, with the pieces represented by tiles carrying numbers between one and six in the manner of dominoes. The board resembles that of *Scrabble* with a pattern of special squares.

Checkered careers

The mind is inured to caution, foresight and circumspection...

- Dr Samuel Johnson, from his introduction to William Payne's 1756 *Treatise on the Game of Draughts*

Draughts lovers would have us believe that a similar game existed in Egypt as far back as 1600BC.

Part of a board and pieces were discovered in an ancient tomb there. There is also evidence that the ancient Greeks played the game.

But it is believed that modern draughts had its beginnings in Spain in the 16th and 17th centuries. In France, Pierre Mallet, mathematician to the king, published a manual in 1688 entitled *Jeu des Dames*.

The pioneer of draughts literature in England was William Payne, a teacher of mathematics, who published his *Treatise on the Game of Draughts* in 1756. The book revealed that even two and a half centuries ago, the experts of the day knew a great deal about draughts.

Another valuable contribution to the literature of the game was made by the publication in 1800 of a work by Joshua Sturges, entitled *Guide to the Game of Draughts*, which contained a great deal of original analysis and corrected faulty play in Payne's book.

Sturges' book went through many editions, and furnished a foundation for later analyses.

Other publications in the next half century worthy of particular attention were James Sinclair's *Game of Draughts* (1832), William Hay's *The Game of Draughts* (1838) and John Drummond's *The Scottish Draughts Player* (also 1838).

However, the most important contribution to the science of the game during that period was

DRAUGHTS

that of Andrew Anderson of Carlisle, Scotland, one of the greatest players ever and one of its most skilled analysts. His work, *The Game of Draughts Simplified*, was published in 1848 and enlarged in 1852.

This book provided a set of "Standard Rules for Play", and a naming of the basic openings. As an analyst, Anderson was unrivalled, and as a player — well, he beat the mighty James Wyllie in four matches out of five they played.

Anderson was the first man to be recognised as World Champion, largely thanks to his victory over James Wyllie in 1847 in a match for the title. He scored nine wins to six losses, with 31 games drawn.

Today, three styles of play are contested at world championship level. "Go-as-you-please" (GAYP), also known

as free-style, is the name given to the style in which each player has complete freedom as to his or her opening moves, from the very first one of the game. Because so many opening variations are known to lead to a draw (should neither player be able to force a win, through lack of superiority in material or position, the game is declared drawn) GAYP lacks popularity at the top echelons.

"Eleven-man-ballot" is one way of spicing up the game. Each player starts with 11 men instead of 12 (the missing man is chosen by ballot and is the same for each player), so the traditional drawing variations may not be employed in the opening.

"Three-move-ballot" is the most popular and exciting form of the game and is played in almost all championship tournaments and matches. A number of three move sequences (Black's first move, White's reply and Black's second move) are written in cards and placed

'Tinsley gained a key and crushing victory



Dr Marion Tinsley, universally recognised as the premier draughts player in the history of the game, plays Chinook

in a bag. Immediately prior to an encounter, one of these sequences is chosen at random and the players then contest two games using that opening sequence, with each of them playing Black in turn.

Dr Marion Tinsley is universally recognised as the premier draughts player in the history of the game. Dr Tinsley was winner of a record seven US National titles and was World Champion from 1955 to 1958. In 1992, Dr Tinsley faced his greatest challenge — a 40-game contest against the Chinook computer at the Park Lane Hotel, in London.

The doctor prevailed in what was arguably the finest high-level draughts match ever played, by four wins to two with 33 draws.

The match featured a dramatic finale, in which Dr Tinsley gained a key and crushing victory in the last game. Chinook, the Canadian computer program, running on a Silicon Graphics parallel series super-computer, had been ordered by its human minder, Dr Jonathan Schaeffer of the University of Alberta, in Canada, to play remorselessly for a

win in game 39. Trailing by a point against its human opponent, two wins for Chinook in the last two games would enable it to become the first computer World Champion in any thinking game.

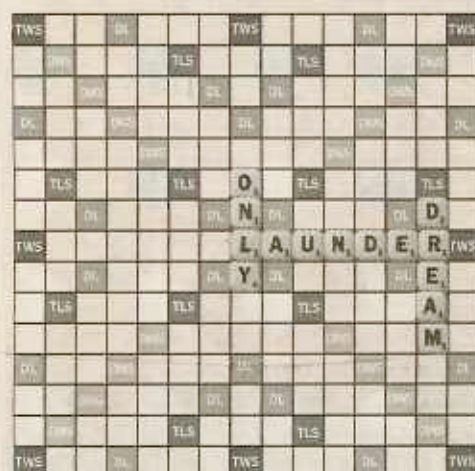
Spurning all chances to draw, Chinook hurled itself into the battle, and on the tenth move it introduced an entirely new idea, designed to throw its opponent off course. Dr Tinsley, defending one of the sharpest opening variations in draughts, known as the White Doctor, never erred. He mercilessly countered Chinook's effort, crowning two pieces as kings

and forcing the machine to resign.

On the 34th move, it was all over. Chinook's position was a wreck. Professor Schaeffer resigned on behalf of his creation, conceding both the 39th game and the match. Game 40 did not need to be played. The score was 20½ to 18½, an unassailable lead for Dr Tinsley.

In the rematch in 1994 Dr Tinsley held his mechanical opponent to six draws before being told to stop by his doctor, and thereby conceding the match. He died in 1995.

DAVID LEVY



Word, and world, domination: Scrabble

What's in a word? 392 points

SCRABBLE

SCRABBLE, the world's leading word game, has 98 letters in the form of tiles that fit the squares on the board (David Levy writes). Each letter is marked with a value that is roughly in inverse proportion to its frequency of use in the language: for example, A, E, L and T are typical one-point letters, while Q and Z count for ten points. (In Poland, in contrast, Z counts for a single point.) Two blank tiles, acting as wild cards, complete the set. The object of the game is to form words that score as many points as possible.

Scrabble was invented over a period of 15 years by two Americans, Jim Brunot and Alfred Butts, and was launched in 1949 by the former. The game did not take off, however, until 1952,

when Macy's, the New York department store, ran a promotion. In the following two years, more than four million sets were sold in the United States.

It was introduced into Britain in 1954 by J.W. Spear & Son and has since been marketed in dozens of countries. More than 20,000 contestants compete annually in the British championships.

More than 100 million games have now been sold in 120 countries around the world, and Scrabble is produced in 31 languages.

Philip Nelkon has won the British Champ-

ionship a record four times, in 1978, 1981, 1990 and 1992. Allan Saldanha was the youngest contestant to win the British title, at the age of 15, in 1993.

The highest number of points scored in a competition is 392, achieved by Dr Karl Khoshnaw, of Twickenham, in April 1992. The word that earned him this incredible score was "caziques" (a variant of caciques), which means "chiefs" in southern Mexico and the West Indies.

The highest game score is 1,049, achieved by Phil Appleby in June 1989. His opponent scored 253 and the margin of victory, 796 points, is also a record. Appleby's score included a single turn of 374 points for the word "oxidizers".

Can intelligence be measured? Tony Buzan and Mensa believe that it can . . . so test yourself with these 20 questions

Tests that freed an underclass

Intelligence Quotient (IQ) is a concept that is often mistakenly assumed to have begun with a desire to limit peoples' freedom by classifying their intellectual capacity. Nothing could be further from the truth.

In the early part of this century, a Frenchman, Stanford Binet, observed that virtually all students attending universities were from the upper classes. Feeling this to be intrinsically unfair, he attempted to devise tests that would be "class free", and that would enable any child to advance through the academic system on intellectual merit alone.

In a work of deep social conscience and considerable intellectual rigour, he selected basic abilities such as vocabulary, knowledge, ability to manipulate numbers and short-term memory, testing massive sections of the population in each of these skills.

Those who scored averagely for any age group were given a score of 100, those scoring below or above being given scores below or above 100 depending on how far they were from average. Thus a score of 70 was particularly low, a score of 130 especially high (in the 'genius' range).

Only in the last few decades has the IQ test begun to form, against the obvious wishes of its originator, its own class system. For a number of years it has been assumed that intelligence quotients are a reflection of an innate ability and are unchanging.

Work by many researchers has shown that the IQ score can be seen much like a high-jump bar. Whatever score you achieve may be considered the "height you can jump at the moment". With appropriate

IQ TESTS

training your score can go, should you wish, either down or up.

Various estimates have been made of the IQs of great intellectuals in history. Leonardo da Vinci and Goethe vie for first place, with Isaac Newton and John Stuart Mill both scoring highly.

Others in the top ten include Shakespeare, Einstein, Jefferson, Edison, Archimedes, Aristotle, Newton, Galileo, Leibnitz, Pitt (the younger), Erasmus and Descartes.

The best-known society for people with high IQs is Mensa, which is setting and marking the IQ tournaments at the Olympiad. As well as providing a forum for special interests ranging from art to zoology, it fosters research in psychology and the social sciences. It currently has more than 100,000 members worldwide and its current chairman is Sir Clive Sinclair.

At the Olympiad the IQ championship will test the standard IQ skills, including verbal skills (vocabulary, word relationship etc), numerical skills (calculation, number relationships etc) and spatial relationship skills.

Short-term memorisation of numbers is one of the major factors in determining your IQ (see below). The average person can remember between six and seven digits presented at the standard rate of just under a second.

This would give an IQ of 100 in this sub-area of overall IQ. A score of eight correct would leap you to between 120 and 130 IQ. And a score of nine to ten would rank you in the genius 140 + IQ range.

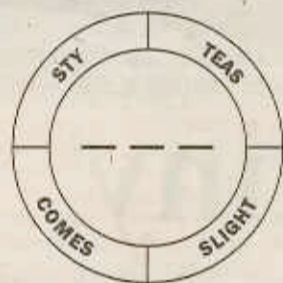
HOW MANY of these IQ questions can you answer correctly in one hour?

1. What numbers come next in these sequences?
(a) 3,5,8,13,21,?
(b) 4,5,8,17,?
(c) 3,4,8,17,33,?

2. Using each of the symbols +, -, x and ÷ once only, find their positions in the sum below to give the highest possible answer.
4 ? 5 ? 6 ? 3 ? 7 ? = ?

3. This number cubed is equal to that same number squared plus two multiplied by the same number all squared. What is that number?

4. In the centre of the circle place a three-letter word which can be inserted into each of the surrounding words to form another word in each case. What are the words?



5. By the addition of these two words a new word can be formed. Can you find it?
TINSEL + MEANT

6. Rearrange the order of the following words and place them in the grid to give three colours reading downwards in the shaded vertical columns.

ORCHARDS, ENTREPOT, CATERING, MORTGAGE, AMBROSIA, FORENSIC



7. On each line place two letters which can be attached to the beginning of the word on the

Test your IQ — and win a book

right to form a new word. The eight new letters will give another word reading downwards. What is it?

	ACID
	SING
	REST
	FINE

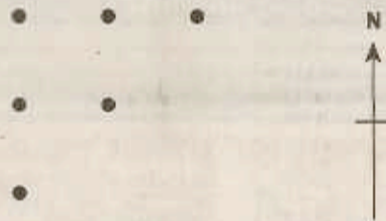
8. What letter is missing from this sequence of letters?

A, T, G, C, L, V, ?, S, S, C, A, P

9. How much should **Lemonade** cost if Coffee = 2lp, Water = 18p and Milk = 15p?

10. Colin has worked as an **ACTOR**, a **COURIER**, a **GLAZIER**, a **MILKMAN** and as an **ANALYST**. Who has worked as an **ASSESSOR**, a **BARMAID**, a **CRITIC**, a **PACKER** and as a **CHEMIST**?

11.



Which town is north of town A if F is northeast of C and West of B A is southeast of D and northeast of E D is north of C and northwest of A?

12. Rabbit is to Buck as Turkey is to: Stag, Cock, Rooster, Bull or Gander?

13. When each of the following words is rearranged, one group of letters can be used to

prefix each of the others to form longer words. Which word is rearranged to form the prefix and what are the new words?

TIP MEANT RAM GIN

14. What is the next number in this sequence?
8, 64, 256, 1536, ?

15. If RUPERT = 52 and CHARLIE = 21, what does FLORENCE = ?

16. If DAVID = 7, and FLORENCE = 10, what does KAREN = ?

17. What number is missing from this grid?

4	60	100
3	24	16
2	6	?

18. What number is missing from this sequence?
-1, -3, -4, -3, 2, 15, ?

19. Allocate a number between 0 and 8 to each of the letters used to make all three sums correct. What are the symbol values?

FADE	HIDE	DEAF
+ BIG	+ CAB	+ CAFE
3242	6491	2609

20. What letter is next in this sequence?
E N S V ?

How many could you answer?

If you answered 16 correctly, then you're in the Super Intelligent league, according to Mensa. A score of 8-9 questions right will put you in the top 30-40 per cent of the population. Score 10-12 and you're probably in the top 10-30 per cent (the Quite Bright category). Score 13-15 and you're in the top 5-10 per cent (Mensa rating: Intelligent).

Similar puzzles can be found in *Boost Your IQ*, one of a series of Mensa paperbacks published by Carlton (£4.99). Carlton are offering free copies of *Boost Your IQ* to the first 50 correct entries to be opened at random by noon, Thursday, August 14.

Sent your answers to The Times IQ test, Colman Getty, Carrington House, 126-130 Regent Street, London W1R 5PE.

The answers will be given in *The Times* on Friday, August 15.

PI, the ratio between the circumference and the diameter of a circle, is one of those rare numbers whose digits follow no known pattern of duplication. With its length apparently infinite, it has become a popular target for potential record-breakers keen to show off their prodigious memories.

As Roger Bannister was to the 'impossible barrier' of the four-minute mile, so Professor A.C. Aitken, Professor of Mathematics at the University of Edinburgh, was to the 'impossible task' of memorising digits of the number indicating the value of pi.

Until he came along, the best results had been around 40 digits. Applying basic systems, Professor Aitken, one of the first to demonstrate that memory could be trained, was able easily to remember the first thousand decimal places of pi — and in reverse order.

Since then, psychology graduate Rajan Mahadevan, has memorised 31,811 digits of pi, a feat which has been the object of a three-year study funded by the National Institute of Mental Health in America.

You must remember this . . .

He first showed his interest in numbers as a five-year-old, when he stunned guests at a family party by reciting the licence numbers of their cars. His father, a prominent surgeon in India, was one of the few guests not surprised: he is fascinated by words, and has memorised all 2,156 lines of Shakespeare's sonnets.

Researchers at Kansas State University, where Rajan was a student, were highly impressed. Said psychology professor Jerome Frieman: "If you give people eight or nine numbers and ask for them back in reverse order, most will do about seven. We give Rajan 40, and he gives them all back."

Yet even this is not the best. In 1995 24-year-old Hiroyuki Goto of Tokyo, memorised 42,195 digits. The British record, established in June, 1980, is held by Brain Club member Creighton Carvello, with 20,013 digits.

Records have also been set

MEMORY

for the fastest novel reader, which includes candidates having to answer in-depth questions on the text to prove it. The world's fastest reader on record is Sean Adam with a speed of 3,850 words per minute.

In a subsequent questioning session, he was able to answer every question that was asked of him by others who had read the book.

Songs too have been fair game for record-breakers. American singer Barbara "Squeak" Moore performed 1,852 from memory in 1988.

One particular party trick has catapulted Dominic O'Brien of Royston, Hertfordshire into the record books. In 1996 he took 38.29 seconds to memorise the order of a shuffled pack of cards.

He has also memorised 266 random digits forwards and backwards in 15 minutes.

Among his other remarkable achievements are memorising successfully 35 packs containing 1,820 cards in no set time limit.

Record-breaking is not a modern phenomenon. The Greek statesman and soldier Themistocles (c528-462BC) was renowned for his ability to be able to remember every name of the 20,000 citizens of Athens, while Xerxes, King of Persia from 486 to 465 BC, was able to recall the names of the 100,000 men in his army.

Yet these figures have been dwarfed in our own time. Over a "memorising lifetime" of 40 years, New Yorker Harry Lorayne, who has made numerous television appearances to demonstrate his abilities, has memorised at least 7,500,000 names and faces of between 400 and 800 people at a time, a record that may never be broken.

Another New Yorker, Frank Felberbaum, demonstrated his

ability to remember sports facts and figures at the Athenaeum Club in London. He memorised perfectly National League baseball statistics from 1876 to 1990, including year, winning team, manager, total winning games for the season, and winning percentage — more than 2,000 pieces of data.

Religious men have also performed miracles — of brain-

power. Imam Al-Bukhari (9th century AD) memorised more than 300,000 prophetic sayings (average length about five lines) word for word — approximately 21 million words, and Ahmad Didat memorised by heart the Koran and 'he Old Testament Bible.

And lacking a written tradition, Maori chiefs have been reported to spend as long as three days reciting the entire history of their tribe, passed on from generation to generation.

TONY BUZAN

CONTINUO®
THE ONE RULE GAME FOR ALL THE FAMILY
'SIMPLY BRILLIANT -
BRILLIANTLY SIMPLE'
- Omar Sharif -
AGES 5 - 105
Over 4,000,000 sold

For further information contact
Westnedge Games
Tel: 0181 871 2654
Fax: 0181 877 1241



Lewis Deyong — whose biggest contribution to backgammon was the Monte Carlo World Championship — with Richard Desurmont and Joe Dwek at Cap d'Antibes

Dicing with destiny

I learnt backgammon in the early Sixties, while living in New York. Floating around the East Side was a polyglot poker game that included Taki (now "Atticus" of *The Sunday Times*), some of his Greek pals, and an amateur golf ace, Donald Marr.

Marr's suggestion, "Why don't you learn backgammon? You'll love it", got me hooked for life. Marr taught me and two other future champions, Philip Martyn and Joe Dwek, both New Yorkers. Marr was already an accomplished player, taking on Ted Basset, Barclay Cooke and other acknowledged experts.

We three were far behind, but game to catch up. At \$5 per point, our first chouettes (the most popular form of money backgammon, in which anywhere from three to ten players can engage simultaneously on the same board) unrolled in my apartment on East 57th Street. I think this venue was preferred because Marilyn Monroe, who was then married to Arthur Miller, lived in the same building.

It was there that, to the accompaniment of oaths and flying dice, the three of us — and others — taught each other to play.

I found backgammon easy to understand, and fun. It was sociable — we could chatter away without breaking anyone's concentration because memory matters little. The simple arithmetic of the odds must be firmly fixed in the mind; other than that, the way the game develops to the current board position is irrelevant. This is the reverse of cards. To play cards well, accurate reconstruction of the bidding or the content of the bottom of the discard pile is a must. In backgammon, you need just to predict the future.

For the uninitiated, backgammon is a racing game. The

BACKGAMMON

HOW TO IMPROVE YOUR GAME

HERE are some helpful tips:

1. Know the basic odds:
 - (i) A direct shot: 9/4
 - (ii) A double shot (eg. any 5 or 6 hits): 4/5
 - (iii) Any double: 5/1
 - (iv) A specific number (eg. 6/1): 17/1
 - (v) A specific double: 35/1
2. Keep your men in play early. Once you have two men on your own one point, they cannot move again. The more flexible your situation, the more rolls you can play well.
3. Do not be afraid to hit, even if it means leaving a blot — with a direct shot, your opponent is a 9/4 underdog

to hit back. If he misses, you may be able to double him out. To put pressure on opponents, tournament players leave blots all the time.

4. Do not be scared to take a double. Assuming there is no gammon involved, you are actually getting odds of 3/1 when you take. If you drop, you lose one point, so if you take and lose two points, you are risking only one more point. But if you take and win, you receive two points from your opponent, plus the one you would have lost by dropping — a total gain of three points for a risk of one (as stated above: 3/1).

two sides run their men around the board in opposite directions, according to the numbers on the dice.

You try to speed up your own progress and retard that of the enemy. When all your men arrive in one quarter of the board you start removing them; the first player to take off all 15 wins.

Tactics for each game are dictated largely by the vagaries of the dice and, sadly, these two little monsters are often treacherous. A delaying position can be unshipped by consecutive 6/6s (the highest roll); similarly, you can lose a nice lead at the very end by throwing 2/1, 3/1, 2/1 (the lowest rolls) — remember, this is a gambling game. Even so, over a series of games, the right strategy will prevail, and the better player will win.

These tactical/strategic bat-

les must have something going for them. I have seen backgammon sets in the Egyptian Museum that are very old indeed.

In antiquity, the game was played by Greeks, Romans, Persians and Arabs; "tables", as it was then, eventually travelled west with the returning Crusaders, and caught on big all across Europe.

'Jefferson mourned the loss of 13 shillings'

Saint-Simon has recorded that Louis XIV played one night a week, and the game was a typical subject of Dutch genre artists of the 17th and 18th centuries. Thomas Jefferson's diary mourns the loss of "13 shillings at backgammon", while Winston Churchill was a redoubtable player.

Meanwhile, back at East 57th Street, I decided to learn bridge, too. What a disaster! Perhaps I chose the wrong teacher, an acknowledged star of that era,

Bobby McPharren. He honed in on my play with the accuracy of a Greg Norman putt. He had charming ways of expressing himself: "Oh, I see you bid three card majors . . . 10 points. Ten. Ten. To help yourself, try to remember it comes roughly between nine and 11 . . . we need seven tricks. There are five trumps in dummy. Perhaps even you can locate the ace/king of hearts in your own hand . . ."

It never stopped. Socrates he was not, but, with hindsight, he was right. I had no aptitude for the game, and, in the words of another backgammon player, (the late Walter Cooke), who also tried bridge, "After trick 3, it's just a mass of cards."

Fortunately for me, backgammon was flourishing. I began playing for bigger stakes and branched out to the other New York chouettes. The best players in the world were all in New York then. Playing long into the night with them riveted the techniques that directed my whole playing career.

In the mid-Seventies, I married Jane Snowden and returned to live in London. By then, thanks to a brainwave on the part of Prince Alex Obolensky, a tournament circuit had developed. I played on this tour, and, in 1974, won the Munich tournament. Then I conceived a gala event in Monte Carlo, which is still the World Championship.

I still assist at two events, both with small fields and high entry fees: the Turnberry Isle Pro-Am during the winter in Miami and, in June, the Aspinall Casino Pairs event in London, sponsored by John Aspinall, himself a life-long aficionado.

My own mantra for playing well: "Always make the move your opponent does not want." Sounds simple, but surprisingly few people manage it.

LEWIS DEYONG

A game of chase, a neural network

THERE are artefacts from ancient civilisations bearing designs suspiciously like the 24 opposed triangular points of a backgammon board. But for most of its history, backgammon was merely a game of chase, not unlike ludo or Parcheesi, with none of the subtlety of chess or some card games.

Then, in the Seventies, Paul Magriel, a mathematician from Princeton University in New Jersey, wrote several books that represented a huge jump in understanding the internal arithmetic of the game. And at the end of the decade, two of the world's best players, Kit Woolsey and Kent Goulding, inaugurated another evolutionary period.

Mr Woolsey (also a world-champion bridge player) ran a number of endgame positions through a computer, and the results astonished even the experts. Mr Woolsey found that if one player held his opponent's ace-point, it would prove almost impossible for his opponent to bear off safely, without leaving a chance of being hit.

Meanwhile, in 1980, Kent Goulding started recording individual games and long matches, and hiring teams to do the same. Unlike in chess or bridge, there were almost no records of past competitions. Today, there is a huge database of games played — and analysed — by experts, with errors identified and with the players' own comments. They are available in text and on diskettes. In Mr Goulding's words: "This was an eye-opening new era. There had always been an elite; now there was a fast-

growing middle class."

The fourth big advance came in 1991, the implications of which are still hardly understood. For years, computer backgammon had been a backwater, with the best programs scarcely able to rise to intermediate playing level. The programmers used the "expert systems" approach, which, crudely speaking, is like asking a lot of different people the best way to play chess, drill for oil, deploy troops, control traffic, whatever.

The basic problem, for humans as well as computers, lies in the sheer size of the numbers. In chess, when a piece or a pawn is taken off, it is out of the game; in backgammon, the checkers are recycled, theoretically without limit.

In 1991, Gerry Tesoro developed an experimental "neural network" program, TD-Gammon, at the IBM research labs. Bill Robertie of Boston, the only player to have won the World Championship in Monte Carlo twice, recalls: "TD-Gammon taught itself to play, starting with only a knowledge of the rules. After playing thousands of games against itself, it reached strong open-player level; within months, it had become world class."

"It plays like a strong human player in many areas, but in others it plays at total variance from what has generally been accepted as correct strategy, leading in increasing numbers of top players to experiment with some of TD's unconventional plays. This is a big breakthrough for backgammon, and for all theories of neural networking."

Mysteries of the Orient

"Chess is humankind's greatest invention. Go its greatest discovery..."

— Chinese proverb
The Chinese game of Go has been said to be an analogy for business management, Buddhist theory and warfare (a book entitled *The Protracted Game* was published in the mid-1970s, proving that Mao Tse-Tung's military campaigns were based on a Go strategy).

Go is about 4,000 years old. In China it is called *wei chi* (the surrounding game), but it reached Europe from Japan, and is therefore usually known here by its Japanese name.

It is a game for two players. Black and white pieces (stones) are placed alternately on the intersections of an initially empty 19 squares x 19 squares board (see diagram). Victory goes to the player who ultimately controls more territory.

There are several legends about the origin of Go. The most popular has it that the game was invented by the Chinese Emperor Shun "to strengthen his son's weak mind".

It is referred to in Chinese texts of about 1000 BC as a game any reader would know. Yi Qiu was the first named Go player in literature, being mentioned by Mencius in the 4th century BC, although the first book exclusively on Go was not written until about AD 700. Confucius is said to have known how to play, and traditionally the Four Sublime Pastimes were music, painting, calligraphy and Go.

Although it reached Japan around AD 700, Go was for centuries a forbidden pastime for the common people. It remained a privilege of the nobility and in particular the samurai, who regarded Go as good military training, and even took it with them on campaign. The game achieved a peak of prestige in the 17th to

GO

19th centuries, when it enjoyed the patronage of the shoguns. Four professional Go academies were established, and there was great rivalry which culminated in the Castle Games, an annual event played in the presence of the shogun. Contestants were not allowed to leave the castle until the games were finished.

The parallels with the development of shogi in Japan at that time reveal a society deeply absorbed by mental games.

Indeed, as early as the 16th century in Japan, both shogi and Go came under the direction of a government department, the Ministry of Shrines and Temples. Both games were

The four sublime pastimes were music, calligraphy painting and Go

thought to be an adjunct to the Buddhist religion, possibly as a result of the attitudes of contemplation and meditation.

Legends, literature and art took Go as a theme. The earliest known picture of Go, showing a woman seated at the board, dates from around AD 690, and was discovered during an archaeological excavation in China. The cultural importance of Go is clear from scores of Japanese prints, mostly 17th to 18th century, depicting gods and humans intent upon the game.

After the fall of the shogunate in 1863, Go lost its patronage and declined. However, in the 1890s fresh prosperity came through newspaper sponsorship. There is now a professional body of more than 400 players, a Go column is a standard feature in many Japa-

nese newspapers, and weekly lightning Go contests are shown on TV. Major championships have first prizes of several hundred thousand pounds, and several European and American experts have emigrated to Japan to seek their fortune in the rigorous world of the Go professionals.

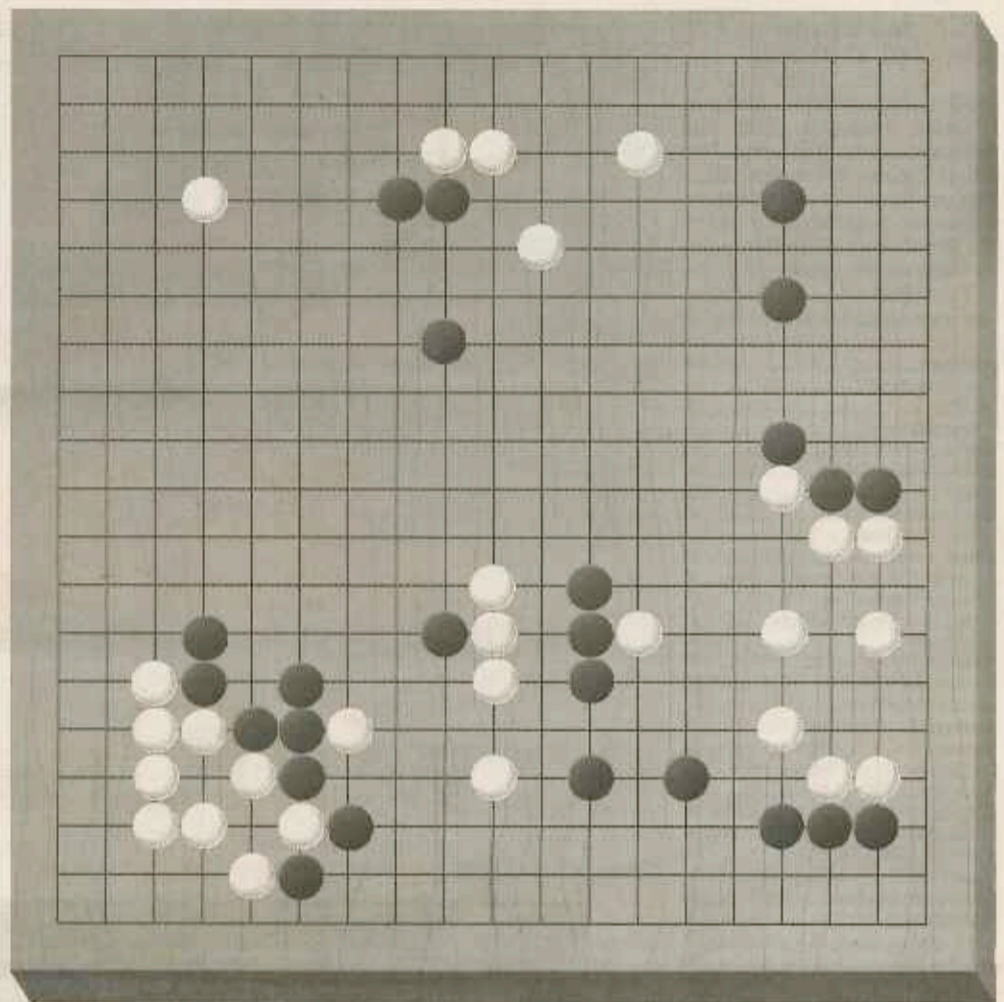
In 1968, an eight-storey Go centre was built in Tokyo to accommodate national administration, professional competitions, facilities for TV coverage and large playing areas. The influence of this Go centre radiates far: in 1989 the first round of the Meijin Sen, or Grand Championship, was played in London.

The most rapid expansion in the popularity of Go has been in South Korea, where even the guidebooks refer to *baduk* as a game that most people play. Korean player Cho Chi-kun emigrated to Japan at the age of six, swearing that he would not go back to Korea until he won the title of Meijin (Supreme Grand Master).

He had to wait 18 years, but in 1981 was able to return a national hero, receiving a decoration from the President, a keen Go player.

In China, Go has flourished or wilted according to the political climate. Since 1974 it has been viewed as part of the national heritage and there is now an annual tournament between the top players of Japan and China. In Taiwan, too, Go is thriving. Nearly every European country has a National Go Association affiliated to the European Go Federation, and there are now thousands of enthusiasts in the West. Millions of people in the East enjoy Go — there are estimated to be ten million club players in Japan alone.

Chess expert Edward Lasker wrote in *Go and Go-moku*: "I am convinced that Go will gradually share with chess the leading position among intellec-



The Go board gradually becomes occupied by the players' black and white pieces

tual games in the Occident." The top 20 Chinese professionals include four women. The strongest, Rui Naiwei, reached the semi-finals of the 1992 Ing Cup World Championship.

The strongest player now resident in Europe is another Chinese woman, Guo Juan, settled in Holland with a young family. It is estimated that the number of possible positions in chess is 10 to the power of 50. For Go, the estimate is ten to the power of 170 — a record among Mind Sports.

Nights on the tiles

MAH-JONGG

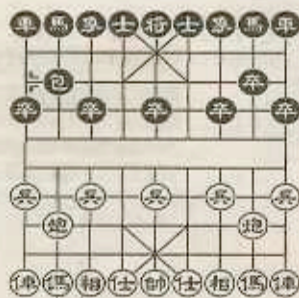
A FOUR-PLAYER tile game akin to rummy. Probably little more than a century old, Mah-Jongg was likely developed from two Chinese card games, *Hanging Horse* and *Watch-the-Pot*. Tiles total 136; there are three suits (circles, bamboos, characters) numbering from one to 9, four of each value, plus honours tiles (winds, dragons). The bonus tiles — flowers

and seasons — are a Western implant and not used in the Chinese game, which is essentially a vehicle for gambling. The scoring system is horrendous. There was a Mah-Jongg craze in Britain in the mid-Twenties, until the arrival of contract bridge.

THE object of xiangqi, or Chinese chess, as with shogi and Western chess, is to checkmate your opponent's king. Unlike Western chess, where a stalemate is a draw, one can also win in xiangqi by forcing your opponent into a position where there is no legal move.

Chinese chess has more possible first moves than Western chess. Double checks are extremely common, with occasional triple and even quadruple checks.

Many Western chess players in China are actually xiangqi crossovers. Chess grandmasters Xu Jun and Ye Jiangchuan were both at one time xiangqi hopefuls. The most famous example is former Women's World Chess Champion Xie Jun, a junior xiangqi champion in Peking. The many similarities between xiangqi and its Western cousin suggest a common origin. Although, historically, the Chinese have always



XIANGQI

maintained xiangqi was locally invented, the prevailing theory on the origin of chess before the Seventies favoured the "Indian Connection". However, since the Seventies, increasing weight has been given to the idea that China already had a version of chess before India.

There were mentions of the xiangqi in documents during the Warring States period (403-221 BC) and even earlier. Chinese historians generally

agree that the modern version was reached during the late Tang Dynasty (AD 618-906).

For a long period, xiangqi was snubbed by high officials, and Go was preferred by the higher classes. However, xiangqi quickly became a game for the masses.

After the Qing Dynasty fell, both the Nationalists and the Communists had many devoted followers of the game. Chiang Kai-shek and Mao Tse-tung were keen players, and Chou En-lai was near master strength. From 1949 on, mainland China and other Asian regions all went through a great surge in xiangqi popularity. In 1956, the game was officially listed as a sports item in China and began its national championship cycles.

During the Cultural Revolution, xiangqi was banned, while outside China it prospered. In 1968, the first of seven Asian team tournaments was held in Singapore.

JAPAN is exporting an esoteric, indigenous pastime as increasing numbers of Westerners are taking up shogi, the distinctive home-grown Japanese national board game and their version of chess.

There are 15 million regular shogi players in Japan, every newspaper has a daily column and television offers a weekly 90-minute instructional programme.

Sponsorship, which comes mainly from newspaper syndicates, is big business, and leading players earn almost £1 million a season from prizemoney, salaries, game fees and book royalties. Top players feature regularly in TV advertising.

Shogi is played on a board with 20 flat, wedge-shaped pieces per side. It has many elements in common with chess. In both games the aim is to checkmate the opposing king. Shogi players each have a king, a rook, a bishop and



SHOGI

nine pawns, all of which move in the same way as their chess counterparts, but the knights are more restricted.

Shogi also sports the romantically named golds, silvers and lances, whose moves have no chess equivalent. Most shogi pieces have the power of promotion, which in chess is confined to pawns, but the most striking feature of the Japanese game is the "drop", which allows a captured piece to be dropped

back on to the board at strategic moments to reinforce attacks and defences.

Captured pieces in shogi never vanish permanently from the board but defect to the enemy. This perhaps indicates that when shogi was being developed it accurately reflected the behaviour of Japanese mercenary armies.

Shogi has common roots with chess. A branch of chess reached Japan in the 8th century and was modified, much as chess was. In the mid-14th century stronger pieces were introduced to the shogi board and promotions and "drops" were added.

There are about 134 professional shogi players in Japan. It can take at least five years before a player is good enough to qualify for the Meijin match for the leading player of the day.

In the West, shogi organisations have sprung up in the United States, Holland, France, Belgium and the UK.

14 MIND SPORTS OLYMPIAD

What's where at the Festival Hall

SCHEDULE OF EVENTS

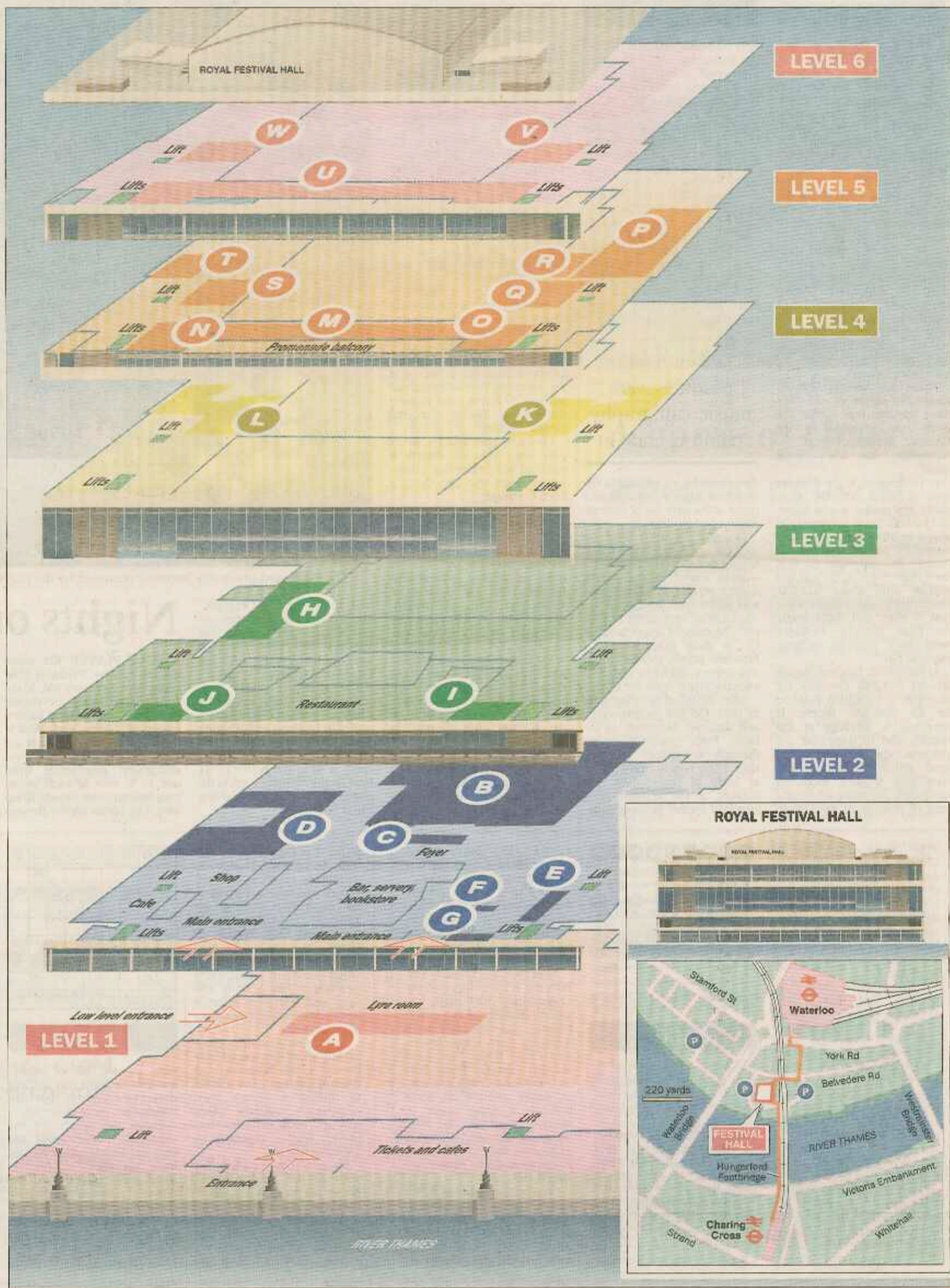
USE the chart below and the diagram (right) to find out what's happening where at the Mind Sports Olympics from August 18 to 24. The letters against each mind sport refer to the Royal Festival Hall's rooms, as show on the graph.

For details of times and dates, see pages 8 and 9.

Abalone.....	W
Backgammon.....	N
Bridge.....	M
Chess (30-min).....	B
Chess (5-min, 23rd).....	B
Chess (5-min, 24th).....	K
Chess (10-min, 23rd).....	B
Chess (10-min, 24th).....	K
Chess Problems.....	S
Chess Terafinal.....	B
Chinese Chess (Olympiad Ch.).....	B
Chinese Chess (Euro Ch.).....	Q
Computer Programming.....	P
Continuo.....	S
Creative Thinking.....	P
Crossword Puzzles.....	B
Decamentathlon.....	K
Draughts - 8x8 (Ch.).....	B
Draughts - 8x8 (10-min, 23rd).....	B
Draughts - 8x8 (10-min, 24th).....	S
Draughts - 10x10 (Ch.).....	B
Draughts - 10x10 (10-min, 23rd).....	B
Draughts - 10x10 (10 min, 24th).....	S
Entropy - 7x7.....	W
Fanorona.....	W
Games Workshop.....	R
Gin Rummy.....	O
Go - 9x9.....	W
Go - 13x13.....	B
Go - 19x19 (Ch.).....	B
Go - 19x19 (Weekend).....	W
Hare & Tortoise.....	W
IQ (Championship).....	L
IQ (1-day).....	R
Japanese Chess (Ch.).....	B
Japanese Chess (10-min).....	K
Jigsaw Puzzles.....	R
Lines of Action/LOA.....	W
Magic: The Gathering.....	Q
Mah-Jongg - Chinese Rules.....	O
Mastermind (Ch.).....	W
Mastermind (10-min).....	K
Mastermind (10-min).....	P
Memory Skills.....	K
Mental Calculations.....	P
Othello/Reversi (Ch.).....	B
Othello/Reversi (Weekend).....	V
Owari.....	B
Rummikub (Olympiad Ch.).....	P
Rummikub (British Ch.).....	S
Scrabble (Weekend).....	L
Skat - German Rules.....	O
Speed Reading.....	P
Stratego.....	O
Twixt.....	W
Zatre.....	W

- The Mind Sports Festival is in Area A, level 1, of the Royal Festival Hall. In this area the public may borrow games (against a small deposit) and play them.
- The medal and prize presentations will all take place in area C, level 2.
- Various games demonstrations and sales stands will be found in area D, level 2.
- Registration for participants is in area E, level 2. Participants should go to the registration desk at least 30 minutes before the start of their first game.
- The information desk is area F, level 2.
- The Skandia "Knowledge Cafe" is area H, level 3.
- The Mind Sports Olympiad games control office is areas I (Sunley Pavilion), level 3.
- The Mind Sports Art Exhibition is in area U, level 6.
- The press room is in the "voice box", area T, level 5.

*Venues and other arrangements may be changed by the organisers during the course of the week.





Unleashing workers' knowledge

INTELLECTUAL CAPITAL

DO not be bashful about being a Grand Master. Mentioning that you are a keen chess player, or a member of the local bridge club on your CV could be more useful than you think, thanks to the concept of "intellectual capital".

Companies are increasingly aware of the importance of measuring the value of their intellectual capital, which is the hidden or intangible assets which do not appear on traditional balance sheets, says Dr Nigel Horne, director of Impact, a KPMG research organisation.

Many staff at KPMG are keen bridge players. Each year staff and existing partners play for the Boyd Barrett Cup and there is also an annual match between partners and retired partners.

"Working with different companies we are looking at ways to measure intangibles, such as patents, brand names, customer lists, essentially what is left when people go home," Dr Horne says. "We will then be able to assess the value of employees' knowledge. It is essential to

value this information and knowledge, and have the right people there to deal with it.

"We are also suggesting to Sir David Tweedie, chairman of the Accounting Standards Board, that advice is offered to directors on how to compile an annual report on their intellectual capital, making them aware of its importance."

Leif Edvinsson is something of an intellectual capital guru. The first corporate director of intellectual capital at Skandia Assurance and Financial Services, his book *Intellectual Capital*, will be published in Britain later this month. Skandia already publishes an annual report on their intellectual capital, and their sponsorship of the Olympiad is a measure of their faith in it.

Mr Edvinsson compares the concept with a tree: "Intellectual capital is the root of financial output. Traditionally visible assets like the leaves and fruits were the measure of a company's capital. But if the company board wants to find out how the company will perform in future, then you have to look at the roots, which will

nourish the visible parts of the tree.

"We are moving into the knowledge era, and mind games are increasingly important as the MSO illustrates. It is important to stretch the mind, doing crosswords and so on.

"People use their minds more to keep ahead with new developments. Intellectual capital is the basis for financial output. It can be broken down into human and structural capital: the value of our employees' minds, of your computer systems, customer data bases, hidden assets."

Terry Finerty at Arthur Andersen's knowledge services department, agrees: "People are increasingly interested in how to manage and capitalise on employees' knowledge, and recognise the value of their minds. People do now realise that companies are based on what people know.

"You only have to look at companies such as Microsoft or Netscape, whose profits are all based on software. That is intellectual capital, with teams of people creating this value.

"Even companies such as Toyota are now competing on knowledge, and it is a competitive currency.

"They are beginning to recognise the need for employees who can think differently and are encouraging more diversity.

"Companies are also interested in giving employees time to think and develop knowledge. We have designed an action learning process at Shell which they find valuable."

So how to calculate what an employees' mind is worth? Mr Edvinsson reckons Skandia looks at what an employee adds to the company, their education, their contacts and ability to renew and develop their skills, of which mind game skills are a part.

Dr Horne agrees. Exercising the mind and keeping it fit and agile through mind games is a valuable asset.

So why not update the hobbies section of your CV, and try to remember how long you were in the school chess club.

AMANDA LOOSE

Computer programming is an arcane and arduous task at the best of times and has been home to those from a science and mathematical background. The modern programmer must be fluent in a computer language — a set of rules that let him or her tell the computer what to do.

For instance, to have a computer print a name on the screen, a programmer will type in a command such as "PRINT Name" in a particular format (or language) which the computer will understand. These commands, often simply called code, are grouped together and saved in a "file" which is then called the program. A complex program can be made up of thousands or millions of lines of such code.

This is a simplification of the procedure, and many more steps are usually taken to create a program, including debugging (removing mistakes from the code which cause the computer to stop or crash), and compiling, which lets the program run in a faster and more compact form.

The contestants in the World Championship for Computer Programming at the Olympiad will face a series of tasks designed to test their ability in three important programming areas: how long it takes them to create a program, its efficiency (ie how quickly does it run or execute) and its elegance (indicated by compactness of the finished code).

Each competitor will use identical computers — supplied by the sponsors Fujitsu/ICL — and will have a choice of software languages with which

Compiling against the clock

COMPUTER PROGRAMMING

```
( // rop has o
if (re < 0)
    re = -re;
if (im < 0)
    im = -im;
if (im < re)
    ( //
    Tr = imag(rop) / real(rop);
    Td = real(rop) + r * imag(rop);
    if (_isnan(d) || d == 0)
        _Re = _Nanv(_Re), _Im
    else
```

A sample of C++ (from *The Draft C++ Standard Library*)

to create their programs. For the technically minded, the languages will be C, C++, Pascal and Prolog.

A different task will be set on each of the five days of the contest, all with a four-hour time limit. The gold medal will

be awarded to the programmer who achieves the highest total score across all five tasks and all three criteria. There will also be medals for the best junior programmer (under 16) and the best programmer in each of the three categories.

The popular image of computer programmers is of geeks with sticky-taped glasses, lank hair and a liking for cold pizza and *Star Trek* movies. It's a nice Hollywood caricature and we love it.

Deep down, we all know that this image is as outdated as the bowler-hatted City gent, so it will be interesting to see the real thing in action.

According to the organiser, David Levy, the championship will offer professional and hobbyist programmers the chance to show what they're made of, and perhaps remove the old stereotype image for ever.

"Nowadays computer programmers are a complete cross-section of the population," he says. "The traditional nerdy type is just as likely to be sitting next to the corporate variety wearing a suit and tie. The profession is changing day by day."

Whether they be Armani-clad smoothies or Atari hackers, would-be world champions should heed a final word of caution from Declan Bergin, the consultant and expert programmer responsible for much of the low-level programming in the latest generation of NASA space shuttles.

"In the professional programming world a vital part of creating good code lies in its ability to be maintained," he says. "A lot of people can write fast or compact code, but if they don't make it easy for others to understand what they've done, it can be a nightmare for future support teams who have to maintain or enhance the program."

NIGEL POWELL

ANSWERS TO IQ TEST, 1930 CROSSWORD AND TOUGH PUZZLES

HOW HIGH IS YOUR IQ?
From page 3

1. Whale (the only mammal).
2. 90, 93. The numbers alternately increase by 3 or double.
3. Hermes. All the others are planets in the solar system.
4. Optics. Acoustics is the science of sound, optics of light.
5. 39. Each subsequent number

- is obtained by doubling the previous one and then subtracting a number which increments by 1 each time (e.g. $3 \times 2 - 1 = 5$; $5 \times 2 - 2 = 8$ etc).
6. Aristotle. All the others are composers.
 7. Rio de Janeiro. Rio is in the Southern Hemisphere. All the others are in the Northern Hemisphere.

8. 197. All the other numbers are perfect squares.
9. J. If the letters are replaced by their position in the alphabet, we get the sequence 2,5,10,17,26. Each of these numbers is a square number plus 1.
10. 22. The upper row numbers increment by 2,3 and 4. The lower row by 3,5 and 7. Now check your score

Correct answers (with IQ rating in parentheses): 1 (82), 2 (90), 3 (98), 4 (106), 5 (115), 6 (124), 7 (133), 8 (142), 9 (151), 10 (160).

A score of 100 is average. 130 is in the genius range.

Garry Kasparov took a similar taste and registered an IQ of 135.

1930 crossword

ACROSS
1. Smear; 4. Pensive; 10. Mayo; 11. Nomad; 13. Respected; 15. Sew; 17. Dean; 18. Diehard; 21. Suspect; 23. Relief; 25. Soar; 26. Skid; 27. Tureens; 30. Con; 33. Immense; 36. Alto; 38. Umbo; 39. Turtle; 41. Rasping; 43. Earldom; 45. Tara; 47. See; 48. Diffident; 50. Egret; 51. Enid; 52. Selenites; 53. Total.

DOWN

2. Maori; 3. Abashed; 4. Par; 5. Eyed; 6. Noses; 7. Evensong; 8. Ostler; 9. Oddity; 12. Deal; 14. Pause; 16. Writ; 18. Desk; 19. Erin; 20. Deuce; 22. Pas; 24. Front; 28. Ensur; 29. Ambition; 31. Sled; 32. Doom; 36. Imp; 34. Monad; 35. Eras; 36. Allegro; 37. Brides; 38. Useful; 40. Tree; 42. Greet; 44. Opera; 46. Anne; 49. Tis.

Plan of Action: 1. Rummikub; 2. Chess; 3. Draughts; 4. Scrabble; 5. Stratego; 6. Backgammon; 7. IQ Competition; 8. Othello; 9. Crossword; 10. Bridge; 11. Mah-Jongg; 12. Go. Easy as ABC: solution below left. Latin Square: solution below right.

C	A	D	B
	B	C	A
B	A	D	C
D		B	C
A	D	B	C
	C	D	A

4	3	6	1	2	5
3	4	5	2	1	6
6	2	4	5	3	1
1	5	3	6	4	2
2	6	1	4	5	3
5	1	2	3	6	4



London's Original Games Shop

More games than you imagined possible!

The longest established games shop in Britain, we are known by gamers the whole world over.

71 Brewer Street, London W1R 3FB
Tel: 0171 437 0761
(2 minutes' walk from Piccadilly Circus)

The first Global Intellectual Battlefield

THE MIND SPORTS OLYMPIAD

with  Skandia

Royal Festival Hall, London, August 18th-24th 1997



**£100,000 prize fund!!
Open to Everyone!**

To enter call **0171-703 2828** or send a sae to:
Mind Sports Olympiad, PO Box 13388, London NW3 2ZF

Visit our website – <http://www.mindsports.co.uk/>

For details of sponsorship, sales and marketing contact:

Don Morris on +44 (0)171 932 0006 Fax +44 (0)171 932 0676