



Brain regions responsible for the intoxicating effects of alcohol p09

what's in the MWJ this month...

- a double page from our **Chairman** begins on p3 with his thoughts on promoting the fostering of giftedness in children throughout Mensa.

- on p5, **Sidharth Hariharan**, a 17-year-old DIM from India, shares with us his mathematical take on the distribution of responsibility in the democratic process, and invites you to respond via the MWJ.

- read all about NASA's experimental helicopter above Mars on p6.

- meet 11-year-old **Madison Ong**, a new Australian member on p7.

- on p8, our Features Editor, Inham Hassen, asks if your great-grandmother danced to her favourite tune on her 100th birthday. He gives us the reason why you might too!

- our cover story is on p9 and explores the theory that the effects of drinking too much alcohol may be caused by the breakdown of alcohol products in the brain and not in the liver.

- on p10, John Blinke informs us with reports of the latest scientific news; this time, among other topics, he presents a snapshot of the latest research into the prevention of the spread of malaria by mosquitoes.

- Therese Moodie-Bloom whose puzzles are on the Mensa International website, has been creating original logic puzzles for a national newspaper, The Australian, for over 20 years. Her puzzles are also used to promote Mensa in many publications worldwide. Thank you, Therese, for providing your puzzles to the Mensa world through the MWJ! (see p12).

Happy reading! Kate Nacard, Editor New research led by the University of Kent has found that adolescents and older adults pay less attention to social cues in real-world interactions than young adults.

The findings published by *Nature Human Behaviour* show that social attention undergoes age-related change, which has potential implications for how successfully we can interpret social interactions in daily life and throughout our lifespan.

Interpreting the facial expression, tone of voice and gestures of others is a vital element of social interaction that allows us to make rapid inferences about others' mental states, such as their intentions, emotions, desires and beliefs. Successful social interaction prompts perspective-taking and empathy along with other essential social skills, and plays an important role in enhancing our wellbeing.

The research led by PhD student, Martina De Lillo, alongside Professor Heather Ferguson and other colleagues at the University of Kent's School of Psychology, is the first of its kind to examine how social attention is allocated during adolescence and whether it differs from adulthood. Furthermore, no previous research has examined the lifespan developmental differences of social attention while people actively participate in real-world interactive situations.

The researchers recorded participants in two real-world social interaction situations (a face-to-face conversation and navigating an environment) using mobile eye-tracking glasses to monitor their attention to social and non-social information. Adolescents (10-19 years), young (20-40 years) and older (60-80 years) adults were assessed in both scenarios.

In the first experiment adolescents and older adults spent less time looking at the experimenter's face during conversation, and more time fixating on the background, compared to young adults. In the second experiment adolescents and older adults spent less time looking at people while navigating a busy University environment, compared to young adults.

Professor Ferguson said: "Focusing less on people and their faces means that adolescents and older adults miss important cues, and this could lead to larger impairments in social interaction, or less opportunities to engage in social interaction with others.

"During adolescence, 10-19-yearolds are still learning and developing peer relationships, so they are experiencing a rapid change in their social experiences and preferences. For older adults, a substantial decline in social participation can lead to isolation, loneliness and poor health. Both groups can therefore be significantly impacted by a lack of social engagement."

https://www.eurekalert.org/pub_releases/2021-05/uok-aao051221.php- a double

FROM THE EXCOMM

Björn Liljeqvist

Regarding gifted education

Globally speaking, school systems come in a variety of ways. Some countries understand gifted education better than others. So, when I read in the news that the concept of advanced classes for those with special aptitude is coming under fire in places where such arrangements have so far been commonplace, I find it troubling. Certainly, gifted children have their own cognitive style and will want a higher pace of learning, more difficult problems to solve, deeper reflection on various angles of all sorts of questions and so on. Do gifted children also require equally gifted adult teachers? I don't know, but as many Mensa members know from experience, it can be a blessing to have one.

Thirty years ago, I had the privilege of being accepted to a special high school with advanced mathematics. It was the only one in my country at the time; egalitarian to a fault, Sweden did not look kindly on gifted education. Sports or music? No problem. Maths and science? No way. Until finally that mental barrier began to crack and the needs of the gifted

were officially recognized also by the government. Of course, education is about more than knowledge. I remember the best thing about it was not the maths itself, but the social environment that emerged when gifted students from all over the country were gathered in one place. (Several

would later join Mensa.)

I am very grateful for that opportunity and wish all gifted children had the same chance. You could make the case that all kids need education on their own level, which is true, but it also misses the point. The needs of the especially gifted are not that easy to meet and often tend to get neglected in a "they'll be fine anyway" kind of manner. That attitude betrays a lack of understanding of the nature of giftedness, and how the needs of the few need not contradict those of the



many.

Mensa can do more to increase awareness of what giftedness means, and why it is important to support it also in schools. It should be possible to do this without going into politics. Several national Mensas have separate charitable branches, the oldest and most famous being the American Mensa Foundation. There is also Mensa Fonds in The Netherlands and the most recent addition, the Nordic Mensa Fund. The aims and the scope

(continued on p04)

of foundations like these differ a bit, but they all focus on the first two goals of the Constitution of Mensa: to identify and foster human intelligence for the benefit of mankind, and to support research into the nature and characteristics of human intelligence. Scholarships and awards to students is one way of doing that. Mensa India's projects Dhruv and Tribal Mensa are even more hands-on, performing testing in areas where gifted youth are likely to otherwise be overlooked.

We need more of these initiatives. Supporting giftedness on a global scale is a cause many members would be happy to get behind and one that Mensa International is exploring. I look forward to reporting more on these developments in future columns of the *MWJ*.

Other News

World Gathering in Houston.

It's wonderful that the event will take place after all – albeit with much of the world absent. The annual meeting of the International Board of Directors was supposed to coincide, but has been cancelled. It may be that we can have our board meeting in November instead, but it remains to be seen. Meanwhile, I wish all World Gathering guests a happy gathering, in celebration of our 75th anniversary.

Extra IBD meeting.

In April, a virtual IBD videoconference was held. No formal motions were voted on this time, as it was a pure discussion meeting. Nonetheless, it was a very useful meeting and you can find a summary of the discussion in the minutes on the website. Like the formal October meeting last year, this meeting was live-streamed to members.

Member community.

We are changing platforms for our international online member community. Facebook, which offers Workplace as a paid service to companies, has discontinued the free version we've been using and for that reason we will need to move to something more affordable. Workplace has been a great success, and we've been fortunate to have this space for the last year. Around 200 members used it on a typical day, 600 in a typical week. By the time you read this, we hope to have a new place up and running. (Updates can be found in upcoming newsletter issues and on mensa.org/members.)

Electronic newsletter.

If you've registered an account on our international website mensa.org, you get our monthly e-mail newsletter. You don't want to miss it.

Governing documents.

Keeping track of formal rules may not be everyone's favourite pastime.

However, if you agree that clear and intelligible governing documents are the foundation upon which so much else rests, you will be pleased to learn that the IBD took a big step recently when the Bylaws of Mensa International was adopted, replacing the older and more *ad hoc* collection of rules known as Actions Still In Effect (ASIEs). The Bylaws have a logical structure with proper chapters and headlines and a detailed table of contents and you can download them from the website.

Elections.

At the time of writing, it's not yet clear who our next Director of Development will be, nor the Director of Smaller National Mensas. What I do know is that Isabella Holz and Jacek Cywinsky will work with me in a second term as Director of Administration and Treasurer respectively, for there were no other candidates for our three positions. I much look forward to that. I also want to thank outgoing DSNM, Mark Dettinger for his work on ExComm during the last four years.

The pandemic forced us to focus more inwardly for the last year and a half, and a stronger and healthier Mensa will come out of hibernation. I can't wait until we will again meet in person for laughter and long conversations in crowded spaces, like normal people.

All the best, **Björn Liljeqvist Chairman, Mensa International**

DOWNLOAD THE FULL COLOUR MENSA WORLD JOURNAL FROM WWW.MENSA.ORG EVERY MONTH Sidharth Hariharan, a 17-year-old DIM from India, has an interesting mathematical take on the distribution of responsibility in the democratic process and would be interested to know the views of experienced voters in democratic systems about how it works in real life. Send your comments to mwjeditor@mensa.org

Sidharth writes:

Imagine the following scenario...

Country X is a free, fair democracy, and two parties, A and B, are contesting the general elections to form government. Every citizen gets a single, anonymous vote, voting independently of every other citizen (an unrealistic assumption, but one with fascinating consequences). To win, a party must secure over half the votes. Say Party A wins by an enormous margin. The question is, who among the voters is responsible for their victory?

Before answering this question, we must understand the nuances involved. From the perspective of any individual voter, their own vote was not instrumental in swinging the result towards Party A. Even if they had voted for Party B, enough people would have voted for Party A to compensate. Since every vote is cast independently of the others, it is not entirely accurate to say that any one individual alone is responsible for the victory - a surprising result, given that the electorate fundamentally consists of individuals.

Since it is ridiculous to claim that no entity is responsible for Party A's victory (since there is by definition a causal relationship between vote and result), we arrive at the inevitable conclusion that responsibility is



somehow shared by members of a collective. But what collective?

It's reasonable to take the number of people responsible to equal 1 + (half the victory margin, rounded down). The problem is, there could be several such sets of people selected from among Party A's vote share. For instance, if the electorate consists of 100 people with the split being 75:25 in favour of A, the number responsible would be 26.

However, combinatorics tells us that there are (75 choose 26) ways to select such a group. Even ignoring how incomprehensibly large this number is, the uncertainty of not knowing exactly which people are responsible renders this approach useless (since everybody votes independently of everybody else). The above argument is generalizable to any subset of Party A's vote share smaller than the entire vote share; the only way to be completely certain which subset is responsible would be to have exactly one way of selecting that subset. Mathematically, this means nobody or everybody is responsible - a result that amazingly agrees with our reasoning!

My interpretation is that for responsibility to be shared without any individual being responsible, the responsibility cannot be divided among the members of Party A's vote share. Rather, these people all form a collective entity that functions as one in being responsible for A's victory. For all practical purposes, there was only one entity casting all of A's votes and one entity casting all of B's votes.

Philosophically, this suggests that entities thinking and acting simultaneously to the same end can be considered as one net entity - an abstraction distributing responsibility without holding anybody singly accountable. This result has incredible ramifications: no one investor caused a stock to plummet; no one senator caused a motion to carry...

When decisions must be made, every one of us must choose. With collective power comes collective responsibility.

Sidharth Hariharan is a 17-year-old DIM from India, based out of Dubai, UAE.

Ingenuity helicopter successfully flies on Mars

NASA's experimental helicopter Ingenuity rose into the thin air above the dusty red surface of Mars on Monday, achieving the first powered flight by an aircraft on another planet.

The triumph was hailed as a Wright brothers moment. The mini 1.8 kg copter even carried a bit of wing fabric from the Wright Flyer that made similar history at Kitty Hawk, North Carolina, in 1903. It was a brief hop just 39 seconds and 3 metres - but accomplished all the major milestones.

Flight controllers at NASA's Jet Propulsion Laboratory in California declared success after receiving the data and images via the Perseverance rover. *Ingenuity* hitched a ride to Mars on Perseverance, clinging to the rover's belly when it touched down in an ancient river delta in February.

The \$85 million helicopter demo was considered high risk, yet high reward. Scientists cheered the news from around the world, even from space, and the White House offered its congratulations.

"A whole new way to explore the alien terrain in our solar system is now at our disposal," Nottingham Trent University astronomer Daniel Brown said from England. This first test flight - with more to come by *Ingenuity* - holds great promise, Brown noted. Future helicopters could serve as scouts for rovers, and eventually astronauts, in difficult, dangerous places. *Ingenuity* has provided a third dimension to planetary exploration and "freed us from the surface now forever," said JPL director, Michael Watkins.

Ground controllers had to wait more than three excruciating hours before learning whether the preprogrammed flight had succeeded 287 million kms away. The first attempt had been delayed a week because of a software error.

When the news finally came, the operations centre filled with applause, cheers and laughter. More followed when the first black and white photo from *Ingenuity* appeared, showing the helicopter's shadow as it hovered above the surface of Mars.

Next came stunning colour video of the copter's clean landing, taken by Perseverance. The helicopter hovered for 30 seconds at its intended altitude of 3 metres, and spent 39 seconds airborne, more than three times longer than the first successful flight of the Wright Flyer, which lasted a mere 12 seconds on Dec. 17, 1903.

To accomplish all this, the helicopter's twin, counter-rotating rotor blades needed to spin at 2,500 revolutions per minute - five times faster than on Earth. With an atmosphere just 1% the density of Earth's, engineers had to build a helicopter light enough - with blades spinning fast enough - to generate this otherworldly lift. The Martian wind was relatively gentle: between 7 kph and 22 kph.

More than six years in the making, *Ingenuity* is just 49 cms tall, a spindly four-legged chopper. Its fuselage, containing all the batteries, heaters and sensors, is the size of a tissue box. The carbon-fibre, foam-filled rotors are the biggest pieces: Each pair stretches 1.2 metres tip to tip.

Ingenuity also had to be sturdy enough to withstand the Martian wind, and is topped with a solar panel for recharging the batteries, crucial for surviving the -130 degree Fahrenheit (-90 degree Celsius) Martian nights. NASA chose a flat, relatively rock-free patch for *Ingenuity*'s airfield. Following Monday's success, NASA named the area for the Wright brothers.

"While these two iconic moments in aviation history may be separated by time and ... million miles of space, they now will forever be linked," NA-SA's science missions chief Thomas Zurbuchen announced.

Up to five increasingly ambitious flights are planned, and they could lead the way to a fleet of Martian drones in decades to come, providing aerial views, transporting packages and serving as lookouts for human

(continued on p11)

MEMBER PROFILE

Madison Ong, aged 11, is a very new member living in a beachside suburb in Sydney, Australia.

Madison heard about Mensa through sheer luck. People always told her that having an IQ of 157 meant that she was very talented, but suspecting that she hadn't done very well in some of the test sections - especially those that required prior knowledge such as word definitions - she decided to look up what an IQ of 157 really meant. From there, she says, "the Butterfly Effect happened, I looked it up, then discovered high intelligence societies, and, then in turn, Mensa!"

Madison's first Mensa event was a dinner at a Sydney hotel which she attended with her parents, and she 'simply clicked' with almost everyone around her. For Madison, the most important benefit of Mensa is the social connection it can provide; she's looking forward to future events where she can meet members around her own age.

Madison attends a local state school and loves lunchtimes because she can read books on chess from the library. She loves chess and although she says she's not very good at it, she loves "the sheer sophistication and possibilities of the game generated through surprisingly simple rules." Her dream is to attain a 2000 FIDE rating which would give her a recognised World Chess Federation (FIDE) title; she will have to get to at least a 2000 **FIDE** rating after 30 rated games overthe-board.

Madison also loves Philosophy, as it is "a mysterious art with no black and white or right and wrong," and despite her main belief



being in Nihilism, she is "also open to other interpretations." Other interests include cosmology, astrophysics, and, "surprise, surprise," she adds, "I am also a diehard fan of the television show, *Rick and Morty*!"

At school, Madison has generally had a relaxed life learning at her fellow classmates' pace, but her Mathematics is excellent. Although she's in Year 6, she achieved a score at the 98th percentile on a Year 10 Maths test, so she now does extension Maths. She has also entered many statewide competitions in Discovery Bay, Hong Kong, and her Mother's Day writing was featured in the May 2019 issue of the *Around DB* magazine.

Welcome to Mensa, Madison! Kate Nacard

Did your great-grandma dance to her favourite tune on her hundredth birthday? You just might too.

And we have found the reason why!

The Duke of Edinburgh was just a couple of months short of becoming a centenarian when he passed away in April this year. The British monarchs from Queen Victoria onward have lived an average of 75 and their spouses have lived longer. And more often than not, they have maintained a good quality of life, even well into their 90s.

Does a privileged existence correlate with a long life? Studies have shown that socioeconomic privilege does have a positive influence on lifespan difference. However, recent research carried out by a team at Boston University concludes that differences in duration and quality of life as we grow older are firstly defined by genetics.

Researchers affiliated with the Long-Life Family Study (LLFS) enrolled over 5,000 participants from 600 families and have been following them since 2006. The LLFS has recruited participants belonging to two groups: long-lived siblings and their children. Since they share lifestyle and environmental factors, the spouses of these two groups were enrolled in as a reference group. To evaluate cognitive performance, the researchers administered a series of assessments to the participants meant to test different

by Inham Hassen

domains of thinking, such as attention, executive function, and memory, over two visits approximately eight years apart. The observations were clear. Individuals from long-lived families performed better than their spouses in the two tests that were designed to determine the domains of thinking, concluding that their rate of cognitive decline was much lower.

The million-dollar question is though, how exactly does genetics facilitate quality of life at old age? Another study carried out at the University of Bologna might have just unravelled the answer. The Italian team of researchers recruited 81 semi-supercentenarians (those aged 105 – 110 years) and supercentenarians (those older than 110 years) from across the Italian peninsula. They compared these with 36 healthy people matched from the same region whose average age was 68.

They took blood samples from the participants and conducted whole-genome sequencing to look for differences in the genes between the two groups. Then, they crosschecked their results with genetic data from a previously published study which analysed 333 Italian people aged over 100 years and 358 people aged around 60 years.



They observed that the most frequently seen genetic changes were linked to increased activity of a gene known as STK17A in some tissues. This gene is involved in three areas important to the health of cells: coordinating the cell's response to DNA damage, encouraging damaged cells to undergo programmed cell death and managing the amount of dangerous reactive oxygen species within a cell. Their conclusion indicated that those who won the genetic lottery among us, get a unique genetic background which makes the bodies more efficient in repairing DNA, thus ensuring longevity and good quality of life into old age.

Sources: Stacy L. Andersen et al. (May 2021), 'Slower Decline in Processing Speed Is Associated with Familial Longevity', Gerontology, 1–13.; Paolo Garagnani et al. (May 2021), 'Whole-Genome Sequencing Analysis of Semi-Supercentenarians', ELife 10.

Brain regions responsible for intoxicating effects of alcohol

The slurred speech, poor coordination, and sedative effects of drinking too much alcohol may actually be caused by the breakdown of alcohol products produced in the brain, not in the liver as scientists currently think.

That is the finding of a new study led by researchers from the University of Maryland School of Medicine (UM-SOM) and the National Institute on Alcohol Abuse and Alcoholism. It was published recently in the journal *Nature Metabolism* and provides new insights into how alcohol may affect the brain and the potential for new treatments to treat alcohol misuse.

It is well known that the liver is the major organ that metabolizes alcohol, using the enzyme alcohol dehydrogenase to convert alcohol into a compound called acetaldehyde. Acetaldehyde, which has toxic effects, is quickly broken down into a more benign substance called acetate. This occurs through a different enzyme called acetaldehyde dehydrogenase 2 (ALDH2). Until now, alcohol and acetaldehyde, produced by the liver, have been considered important players in triggering the cognitive impairment associated with imbibing. Acetate, on the other hand, was considered relatively unimportant in producing effects like motor impairment, confusion, and slurred speech. Researchers also did not know which brain region or particular brain cells were most impor-



tant for alcohol metabolism.

To learn more about the role played by the brain in alcohol metabolism, the researchers measured the distribution of ALDH2 enzyme in the cerebellum, using magnetic resonance (MR) scanners in both mice and in human tissue. They observed that ALDH2 was expressed in the cerebellum, in a type of nerve cell called an astrocyte, in both human brain tissue and in living mice.

The researchers found that this enzyme controlled the conversion of acetaldehyde into acetate in the brain. They also found alcohol-induced cellular and behavioural effects in specific regions of the brain where this enzyme was expressed. Acetate was found to interact with the brain messenger chemical called GABA, which is known to decrease activity in the nervous system. This decreased activity can lead to drowsiness, impair coordination, and lower normal feelings of inhibition.

"We found ALDH2 was expressed in cells known as astrocytes in the cerebellum, a brain region that controls balance and motor coordination," said Qi Cao, PhD, Assistant Professor of Diagnostic Radiology and Nuclear Medicine at the University of Maryland School of Medicine. "We also found that when ALDH2 was removed from these cells, the mice were resistant to motor impairment inducted by alcohol consumption."

Su Xu, PhD and his team also found the enzyme ALDH2 in other brain regions responsible for emotional regulation and decision-making (both impaired by excess alcohol consumption), including in the hippocampus, amygdala, and prefrontal cortex.

These findings suggest that certain brain regions are important for alcohol metabolism and that abnormalities in the enzyme production in these brain regions can lead to detrimental effects associated with alcohol misuse. They also suggest that acetate produced in the brain and in the liver differs in its ability to affect motor and cognitive function.

"Our next step is to determine whether these mechanisms observed in mice also exist in people," said Dr. Cao. "We would like to know whether alcohol metabolism is directly regulated in the human brain. If further research confirms this to be the case, it could lead to potential new targets for treating alcohol use disorder.

Sciencedaily.com April 14, 2021 Photo by Maria Derevianko on Unsplash

supplementally...

by John Blinke

Brush with Success

Science News, April 10, 2021. "Toothpaste Could Brush Away Peanut Allergy."

One way to deal with allergies is to take small doses of the allergen every day, and to increase them gradually. But you must get shots or pills regularly for years. Scientists are working on a peanut allergy treatment that is incorporated in toothpaste. We already have the habit of daily brushing, so it would require no extra effort to dose yourself. But there is some concern about people with bad gums: an allergen in toothpaste might jump right into the blood stream and cause serious problems. Safety trials are under way for the peanut toothpaste.

Moving In

New Scientist, April 14, 2021. "Exploring 'Aquaterra', The Drowned Continent Walked by Our Ancestors."

How did humans spread all over the planet? The latest idea is they followed coastlines. Because the migration happened when sea levels were much lower, old coastal travel routes and early settlements are now under hundreds of feet of water. This is a mixed curse because it makes artifacts difficult to reach, but it also protects them from much of the abuse and looting inflicted upon surface sites.

Pyroaerobiology

Science News, April 10, 2021. "Smoke and Microbes." Microbes can surf on dust particles, sometimes spreading Valley Fever in western dust storms. Experiments done at the University

of Idaho, Moscow, Idaho, show that bacteria, moulds and viruses, in the soil can also ride on smoke particles. And they aren't bothered much by the heat of a wildfire. Because fires can spread smoke thousands of miles, they might spread diseases equally far. In order to find out for sure, researchers are using drones and sampling poles to grab particles above controlled fires.

It's In the Air

ScienceDaily, April 20, 2021. "Flushing a Public Toilet? Don't Linger, Because Aerosolized Droplets Do." A toilet flush is a dynamic event with lots of noise and splashing — especially in pressure operated public toilets. You might think this energetic event would fill the air with droplets of whatever is in there, and you would be right. Researchers at Florida Atlantic University's College of Engineering and Computer Science measured the aerosols generated by toilet flushing. The air quickly fills with tiny droplets to a height of



about two metres. The droplets are so tiny that they hang in the air for a long time and could enter your bloodstream pretty quickly when inhaled. Given that SARS-CoV-2 and other bad bugs can be present in toilet water, a quick exit from the lavatory is a good idea.

Driving Disease Away

ScienceDaily, April 13, 2021. "Simple Genetic Modification Aims to Stop Mosquitoes Spreading Malaria." Malaria is a serious problem in many parts of the world. Mosquitoes that transmit it are increasingly resistant to insecticides, and the malaria parasites themselves are becoming immune to drugs. So, scientists at Imperial College London, UK, are preparing to use CRISPR-Cas9 against them. They can make the mosquitoes resistant to the parasite and they can make that resistance inheritable from one generation of mosquito to the next. They do this by inserting a gene that turns on when the insect has a blood meal.

When modified insects breed with wild ones, their offspring also have inheritable resistance to parasites. The developers want to make sure their method is safe and effective before asking permission to test it in the wild.

Rated X

ScienceDaily, March 31, 2021. "First X-Rays From Uranus Discovered." Why is the planet Uranus emitting x-rays? Nobody knows, but scientists can say for sure that the Chandra x-ray observatory saw bright x-ray features there in 2002 and 2017. Best bet for now is that these are reflections of something going on in Uranus' thirteen rings.

John Blinke

(Photo: Егор Камелев on Unsplash.com)

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(continued from p6)

crews. On Earth, the technology could enable helicopters to reach new heights, doing things like more easily navigating the Himalayas.

Ingenuity's team had until the beginning of May to complete the test flights so that the rover could get on with its main mission: collecting rock samples that could hold evidence of past Martian life, for return to Earth a decade from now.

Send your news and articles of interest to the Mensa World Journal! mwjeditor@mensa.org

MWJ INTERNATIONAL POETRY COMPETITION 2021

Members are invited to submit their original poem to the editor, mwjeditor@mensa.org,

You only have until August 1! Poems are to be previously unpublished and no longer than 30 lines in length. The theme for the competition is **Reflection**. All entries must be in English and following the judges' decision, no correspondence will be entered into.

By submitting an entry (maxi mum of one entry) into the competition, members understand that their poem may be published in the *Mensa World Journal* or in any other National Mensa journal at the editors' discretion. The author will, of course, be acknowledged.

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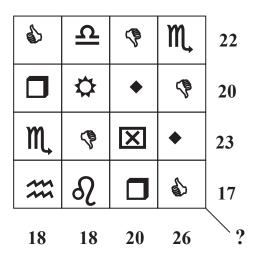
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THERESE'S TEASERS

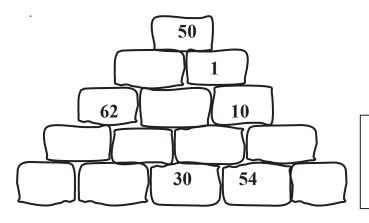
Cryptosum

Each symbol represents a different digit from 1 to 9. The sum of the digits in each row and column is shown. Find the sum of the numbers along the diagonal line from the top left-hand corner.



Cairn

The number on each stone represents the difference between the numbers in the two stones on which it sits. There is a two-digit number in each of the bottom stones, using the digits 0-9 once each.



Rebus

Which saying is represented below?



Wordplay

Which LEAF can have an INSECT follow to become a PROCESSIONAL SPECTACLE?

Which dogs can be produced by:

a. REAL BOARD losing the English in confusion;

- b. Forcing this dog to RETEST;
- c. Having a TURN after a LOUD NOISE;
- d. Failing to conquer the ALPINES;
- e. Mixing LMN with an OGRE;

f. Allowing a STRINGED INSTRUMENT to meet an ALIEN;

g. Getting a MOUNTAIN PASS and an UNTRUTH to follow an EDGE.

Anagram riddle

7 letters have I, you can change them around To make words to vary by more than a sound:

- * Shunned, neglected; left all alone;
- * Starting again, after already done;
- * Rusting away may soon be gone!

Now that you've solved me, which words have you found?

Answers

Cryptosum: 23 (5 + 3 + 8 + 7) **Cairn:** 92 17 30 54 68 **Rebus:** Pushing up daisies **Wordplay:** Page (pageant) **Dogs:** a) Labrador b) Setter c) Dingo d) Spaniel e) Mongrel f) Basset g) Border Collie)**Anagram Riddle:** Ignored Redoing Eroding

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