

The Mind Sport of Memory

The Mind Sport of Memory is both a fun, valuable hobby, as well as an amateur sport for all ages. At the fun end of memory, informal competitions take place in Brain Clubs and other Mind Sport groups. These competitions take many different forms.

Events that comply with the WMSC standard rules will be included in the World Rankings, be recognised for world records and listed in the official World Memory Statistics on the website.

National events of less than 10 disciplines, or that are non-standard in any way may be included in National Rankings for that country, but will not be included the World Rankings.

At a World level, some disciplines like Random Cards and Numbers can have a one hour memorisation period and a two hour recall time. At a National level, memorisation times can be reduced to five minutes, with a ten or fifteen minute recall time to suit the level of competitors taking part.

Another factor in the choice of disciplines is the preparation of competition materials. Some disciplines, like Names and Faces, Historical/Future Dates and Random Words, take some time to produce the Memorisation and Recall Papers. These types of discipline require experienced Arbiters and time for marking.

Although it is not essential when organising fun memory events and competitions, an organiser would gain invaluable experience for running their own event by joining the International Guild of Mind Sports Arbiters and undertaking Level One Arbiter training.

Discipline 1. Names and Faces

Aim

To commit to memory and recall as many names as possible and link them to the right face.

Time	National (Speed)	International	World
To memorise	5 minutes	15 minutes	15 minutes
To recall	15 minutes	30 minutes	30 minutes

Memorisation

1. Colour photographs of different people (head and shoulder shots without backgrounds) with a first name and a second name printed underneath each picture.
2. The number of faces presented equals the current world record +20%.
3. Names are assigned randomly to avoid competitors obtaining clues to the name by the ethnic origin of the face.
4. A full mix of ethnicity, age and gender of faces is used:- Male/Female ratio is 50:50; Adult/Child ratio is 80:20; and as a general principle, one third of Adults will be approx. 15-30 years old, one third 31-60 years old and one third seniors 61+ years old.
5. All Names and Faces are to be from a wide range of ethnic groups/regions and allocated evenly:

Region	Includes:
1. English/Anglo Saxon	British, Welsh, Australian, North American
2. European	German, French, Swedish, Italian, Russian
3. Middle Eastern	Arabic, Egyptian, Israeli, Turkish
4. Eastern Asian	Mandarin, Cantonese, Japanese, Korean
5. Central Asian	Thai, Filipino, Vietnamese, Malaysian
6. Far Eastern	Indian, Pakistani, Mongolian
7. African	Afrikaans, Zimbabwean, Kenyan
8. Latin/Hispanic	Spanish, Mexican, Chilean, Argentinean

6. First and Second Names are combined entirely at random (e.g. a face may have a Chinese first name and a European surname) and are randomly assigned to faces.
7. First names are assigned according to gender (e.g. female names to female faces only).
8. Each name must be used once only in a single competition.
9. Hyphenated names, such as Sue-Ellen or Barton-Smith, are not used as they can be considered as two names in some cultures i.e. Mandarin/China.

10. Chinese first names that are two syllables/characters, such as Kin Pong, are combined with the second syllable/character capitalised KinPong.
11. Accents in names may be displayed (such as ú é á ñ ç õ í) but are not required for scoring – no penalty will be incurred if an accent is not included on a Recall Paper.
12. No bias towards an individual country will be accepted in a national competition e.g. it is not allowed to use all French names in a French competition.
13. All National, International and World records that did not conform to this ruling (announced in February 2011) were reset to zero since a comparison with previous events was invalid.
14. Pictures may be provided as:-
 - 3 rows of 3 images per page on sheets of A4 paper
 - 3 rows of 5 images per page on sheets of A3 paper
 - 4 rows of 6 images per page on sheets of A3 paper
15. Competitors who do not use a Roman alphabet (e.g. Chinese, Japanese, Mongolian, Arabic, and Hindi) may request a translation into their own language at least one month before the tournament.
- 16.
17. In the case where more than one language is displayed i.e. English and Simplified Chinese, competitors must select/ memorise one language only.

Recall

1. Competitors will be given the colour photographs again in the same format as the Memorisation Paper but with the names removed and the pictures in a different order/page.
2. Competitors must clearly write down the correct name (first and/or second name) under each photograph.
3. In the case where more than one language was displayed on the Memorisation Paper, i.e. English and Simplified Chinese, competitors must answer with one language only.

Scoring

1. A point is awarded for every correctly spelt first name.
2. A point is awarded for every correctly spelt second name.
3. Points are still awarded if only the first name or the surname can be recalled.
4. The Memorisation Paper shall contain no repetitions of first or surnames. Correspondingly, the repetition of names on the Recall Paper is not allowed. A penalty of 0.5 point may be deducted if a first or surname is repeated by the competitor on the Recall Paper more than two times. Penalty applies for each occurrence of a name being repeated.
5. An incorrect first name or surname scores 0 points.

6. Where two names are written under a face, they must be written in the correct order. If surname is written before first name, then it is considered incorrect and scores 0 points.
7. There is no penalty if either first name or surname is left blank.
8. The results are totalled. The total score is rounded up to the nearest whole number, written at the top of the Recall Paper and entered into the database as a whole number i.e. 45.5 is rounded up to 46.
9. Accents in names and capitalisation, such as François or KinPong, may be displayed but are not required for scoring i.e. Francois or Kinpong are considered correct answers.
10. No points are awarded if a second language is used e.g. if the majority of answers are in Simplified Chinese and one answer is in English, then the English answer is void.
11. In the case of tied winning scores, the winner will be decided by looking at the photograph(s) to which a name has been incorrectly assigned - the competitor with fewest incorrectly identified names will be the winner.

Note: Full size memorisation and recall sheets can be downloaded from www.worldmemorychampionships.com

Translations

Translations for non-Roman alphabets are made available at the World Memory Championships and some National and International competitions on request with a minimum of one month's notice.

These include:-

- Arabic
- Traditional Chinese
- Simplified Chinese
- Japanese
- Mongolian



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Discipline 2. Binary Numbers

Aim

The aim is to commit to memory and to recall as many binary digits (e.g. 101101) as possible.

Time	National (Speed)	International	World
To memorise	5 minutes	30 minutes	30 minutes
To recall	15 minutes	60 minutes	60 minutes

Memorisation

1. Computer-generated numbers are presented in rows of 30 digits with 25 rows per page. (750 digits per page)
2. The total number of digits presented equals the current world record +20%. More digits are available from the adjudicator if requested one month in advance of the competition.
3. At the competitor's discretion, transparent film, pre-made, with vertical lines may be used in order to eliminate the drawing of lines at the beginning of memorisation. These must be approved by the adjudicator before the competition and collected at the end of memorisation. Every effort is made to ensure a standard format/layout of the Memorisation Sheet but cannot be guaranteed.

Recall

1. Competitors must use the Recall Papers provided. Pre-printed transparent film is used for scoring.
2. . It must be clear how the rows presented on the Recall Paper relate to the rows on the Memorising Paper (missing rows must be clearly indicated).
3. Competitors may choose to leave blanks instead of writing zeros ('0's). Competitors must be consistent on all pages - either zeros or spaces. All blanks will be marked as if it was a zero unless the end of a row is indicated.
4. Last row only - Competitors must mark the end of their recall in a clear and unambiguous way, such as 'stop' 'end', 'E', 'e' or a horizontal line after the last square. If the end is not marked like that, it will be assumed that recall ends after the last '1' (one) in the last row.

Scoring

1. 30 points are awarded for every complete row that is correctly recalled in order.
2. For every complete row of 30 that has a single mistake in it (this includes a missing digit), 15 points are awarded.
3. For every complete row of 30 that has two or more mistakes (including missing digits), 0 points are awarded for that row.
4. There is no penalty for missing rows.
5. For the last row only. If the last row is incomplete (e.g. only the first 20 numbers have been written down) and all of the digits are correct, then the points awarded will equal the number of digits recalled (20 in this example).
6. If the last row is incomplete and there is a single mistake (this includes a missing digit) then the points awarded will equal half the number of digits recalled. (For an odd number of digits, the fraction is rounded up e.g. 19 the score would be $19/2$ rounded up equals 10)
7. In the case of tied winning scores, the winner will be decided by looking at the rows the competitor tried to recall but for which he/she got 0 points. For every correctly positioned Binary Number in these rows, they will be given 1 decision point. The competitor with the most decision points is the winner.

Memory Championships
Binary Numbers Memorisation Sheet

1 1 0 1 1 1 1 1 0 1 0 1 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 1	Row 1
1 1 0 1 0 1 1 1 0 0 0 0 1 1 1 1 0 1 0 1 0 0 0 1 1 0 1 0 0	Row 2
1 0 1 1 1 1 0 0 1 0 1 0 1 0 1 0 1 1 0 0 0 0 0 0 0 1 0 0 1 1	Row 3
1 1 1 1 1 1 1 0 0 1 1 0 1 1 1 0 0 1 1 1 1 1 1 1 1 0 1 0 1	Row 4
0 1 0 0 0 1 1 1 1 0 1 1 1 0 0 1 0 0 1 1 0 0 1 0 1 1 0 0 1 0	Row 5
1 0 0 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 1 1 1 0 0 1 0 1 1 0 0	Row 6
0 1 0 0 0 1 0 1 1 0 0 1 1 0 1 1 0 0 0 0 1 0 1 1 1 1 0 0 1 1	Row 7
0 1 0 0 0 1 1 1 0 0 0 0 1 1 0 0 0 0 1 0 0 0 1 0 0 0 0 1 1 0	Row 8
1 1 1 0 0 0 1 1 1 1 0 1 0 1 0 0 0 0 1 0 1 1 0 1 1 1 0 1 1 0	Row 9
0 0 1 0 1 0 1 1 0 0 1 0 0 0 1 1 1 1 0 1 0 1 0 0 1 0 1 1 0 1 0	Row 10
1 0 0 1 0 0 0 1 1 1 0 1 1 0 1 1 0 1 0 0 1 1 1 0 0 0 0 0 1 1	Row 11
1 0 0 0 0 0 0 1 1 1 1 0 0 1 0 1 0 0 1 0 0 1 1 1 0 1 0 1 1 0	Row 12
0 0 1 0 1 0 1 1 1 0 0 0 1 0 1 0 0 1 0 1 0 0 1 1 0 0 0 1 1 1	Row 13
0 1 1 1 0 1 0 0 0 1 1 0 1 1 1 0 1 1 1 1 0 1 1 1 0 0 1 0 0	Row 14
1 0 1 1 1 0 1 0 1 0 0 0 0 0 0 0 0 1 0 0 1 1 1 1 0 1 1 1 1 1	Row 15
0 0 1 1 1 0 0 1 0 0 1 0 0 0 1 0 1 0 1 0 1 0 0 1 0 0 1 0 0 1	Row 16
0 1 1 1 0 0 1 0 0 1 0 0 0 1 1 0 1 0 1 0 0 0 1 1 1 0 1 0 1 0	Row 17
1 1 1 0 1 1 1 0 0 0 1 0 0 0 0 1 1 1 1 0 0 1 1 1 0 1 0 1 0 0	Row 18
1 0 1 0 1 0 1 1 1 1 0 0 0 1 1 1 1 0 1 0 1 1 0 0 0 0 1 1 1 1	Row 19
0 0 0 1 0 1 1 0 0 1 1 0 1 0 1 1 1 0 1 0 0 0 1 0 0 1 0 0 0 0	Row 20
0 0 1 0 0 0 0 1 0 1 0 0 0 0 0 1 1 0 1 0 0 1 0 1 1 1 1 1 0 1	Row 21
0 0 0 1 0 0 1 1 1 1 1 1 1 0 1 0 0 0 1 0 1 1 1 0 1 1 1 0 1 0	Row 22
0 1 1 1 0 0 1 0 1 1 0 0 0 0 1 0 0 1 0 1 0 1 1 0 1 0 1 0 1 0	Row 23
1 1 1 1 1 0 1 1 1 0 0 1 1 0 1 1 1 0 1 0 1 0 1 1 1 1 0 0 1 0	Row 24
0 1 0 0 1 0 0 0 0 0 0 0 1 0 1 0 0 1 1 0 1 1 0 1 1 0 1 1 0 0	Row 25

Note: Full size memorisation and recall sheets can be downloaded
from www.worldmemorychampionships.com

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Discipline 4. Abstract Images

Aim

To commit to memory and recall the sequence of abstract images in as many rows as possible.



Memorisation

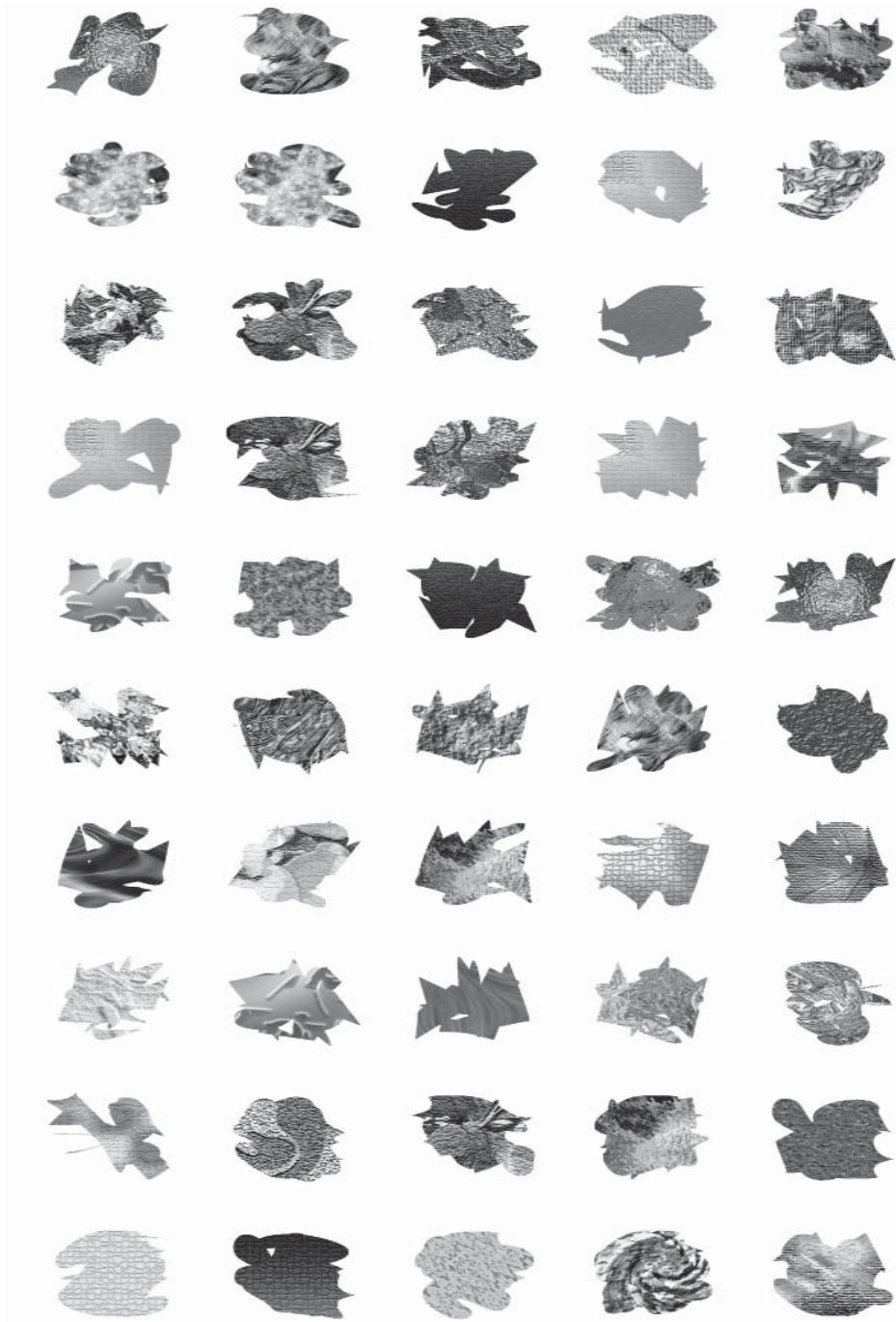
1. A4 pages each containing 10 rows of 5 images each. The images are considered to be in order e.g. 1, 2, 3, 4, 5.
2. Each row is separate and the maximum number of images is five. It is invalid to create a sequence of more than one row i.e. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 etc
3. The number of images presented equals the current world record +20%.
4. Competitors may choose which rows to attempt.
5. IMPORTANT - No writing (e.g. pens or pencils) or measuring (e.g. rulers) instruments or additional sheets of paper may be present on the desk during the memorisation phase of this discipline. What constitutes a measuring instrument is at the discretion of the Chief Arbiter.

Recall

1. The Recall Paper is in the same format as the Memorisation Paper but with the five images in a different sequence within each row.
Note: the rows are in the same order.
2. Competitors must write under each image a number indicating its original position (reading from left to right) e.g. 4, 3, 1, 2, 5.

Scoring

1. Five points are awarded for every correct row.
2. If there are any omissions or errors within an attempted row, one point is deducted from the overall score (e.g. perfect rows score +5, rows with errors score -1).
3. There is no penalty for any missing row.
4. If the final score is a negative it is rounded up to zero.



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Discipline 5. Speed Numbers

Aim

1. To commit to memory as many random digits (1, 3, 5, 8, 2, 5, etc.) as quickly as possible, in complete rows of 40 digits, and recall them perfectly.
2. Note: there is a break after the recall phase of Trial 1 to allow for scoring of the first attempt. Competitors are advised of their results before attempting the second trial.

Time	National (Speed)	International	World
To memorise	5 minutes	5 minutes	5 minutes
To recall	15 minutes	15 minutes	15 minutes
Trials	1*	2	2

* A National competition may conduct a second trial if the Championship is over two days (e.g. Sweden and Australia) – this assists those practicing for an International and/or World Memory Championships.

Memorisation

1. Computer-generated numbers are presented in rows of 40 digits with up to 25 rows per page.
2. The number of digits presented equals the current world record +20%. Further digits are available from the adjudicator if requested one month in advance of the competition.

Recall

1. Competitors should use the Recall Papers provided.
2. If a competitor wishes to use his/her own Recall Papers, these must be approved by the adjudicator before the competition. Competitors must write their recalled numbers in rows of 40 digits.
3. It must be clear how the rows presented on the Recall Paper relate to the rows on the Memorising Paper (missing rows must be clearly indicated).

Scoring

1. 40 points are awarded for every complete row that is correctly recalled in order.
2. For every complete row of 40 that has a single mistake in it (this includes a missing digit), 20 points are awarded for that row.
3. For every complete row of 40 that has two or more mistakes (including missing digits), 0 points are awarded for that row.
4. There is no penalty for missing rows.
5. For the last row only. If the last row is incomplete (e.g. only the first 29 numbers have been written down) and all of the digits are correct, then the points awarded will equal the number of digits recalled (29 in this example).

6. If the last row is incomplete and there is a single mistake (this includes a missing digit), then the points awarded will equal half the number of digits recalled.
7. For an odd number of digits, the fraction is rounded up e.g. if 29 and there is one mistake, the score is divided by 2, $29/2 = 14.5$ and rounded up to 15.
8. For two or more mistakes in the last row (including missing digits), 0 points are awarded for that row.
9. The winner of the discipline is the competitor with the highest score (the best score from the two attempts is put forward).
10. In the case of tied winning scores, the winner will be the competitor who has a better second trial. If the competitors are also equal in this second trial the adjudicator will look at the extra lines of the best trial of each competitor (The lines the competitor tried to recall but for which he/she got 0 points). For every correctly positioned number, 1 decision point will be given. The competitor with the most decision points is the winner.

Discipline 6. Historic / Future Dates

Aim

The aim is to commit to memory as many numerical historic/future dates as possible and to link them to the correct fictional event.

Time	National (Speed)	International	World
To memorise	5 minutes	5 minutes	5 minutes
To recall	15 minutes	15 minutes	15 minutes

Memorisation

1. The number of different historic/future dates presented equals the current world record +20%, with 40 dates presented per page.
2. The historic/future dates are between the years 1000 and 2099.
3. All historic/future dates are fictitious or general and non-culturally specific (e.g. Peace Treaty signed).
4. The length of the event text is between one and six words.
5. Statistically the whole range of years will be used and no year (and no event) will be presented twice.
6. The four-digit number of the historic/future years is on the left side of the event and the events are displayed vertically under each other.
7. Both columns are to be randomised so as not to appear in number or alphabetical order.

Recall

1. Competitors will be given Recall Papers with 40 historic/future event texts written on each page.
- 2.
3. The historic/future event texts are in a different order from that in the memorising phase.
- 4.
5. Competitors must now write down the correct year in front of the event texts.

Scoring

1. A point is awarded for every correctly assigned year. All four digits of the year written down must be correct.
2. Half a mark is deducted for an incorrectly assigned year.
3. Only one four-digit year can be written down in front of the event.
4. There is no penalty for missing dates.
5. The results are totalled. The Total Score is rounded up to the nearest whole number, written at the top of the Recall Sheet and entered into the database as a whole number i.e. 45.5 is rounded up to 46.
6. If the final score is a negative, it is rounded up to zero.
7. In the case of tied winning scores, the winner will be decided by counting the mistakes (incorrectly assigned dates) of the competitors.

8. The competitor with the least number of incorrectly assigned dates is the winner.

Translations

Translations are made available at the World Memory Championships and some National and International competitions on request with a minimum of one month's notice.

Historic and Future Dates Memorisation Sheet

Number	Date	Event
1	1945	Dentist repairs teeth with wood
2	1138	Jupiter's moons colonised
3	2034	Internet makes TV broadcasts obsolete
4	1942	Rare butterfly photographed
5	1934	Library book returned 59 years late
6	1142	Bus driver forgets route
7	1406	Sequel to best-selling novel flops
8	1540	Farmer breeds sheep with red fleece
9	2000	Bull fighter is injured
10	1866	Robots go on strike
11	1032	New fashion - Wearing hats made of fruit
12	1040	Bangra dancing is worldwide craze
13	2063	Airline pilot foils hijack
14	1810	Night club opens
15	1385	Space rocket explodes on launch pad
16	1670	Military hero returns home
17	1583	Opera Singer loses voice
18	2074	International Space Station completed
19	1854	Cricket team wins test match
20	1839	Cook bakes world's biggest cake
21	1978	Inventor designs mouse trap
22	1708	Time flows backwards
23	1585	Florist shop opens new branch
24	1267	Bollywood film is most popular release of the year
25	1902	Global creativity shortage
26	2059	Alcoholic drinks banned
27	1316	Newspaper folds
28	1230	Nuclear power station declared safe
29	1595	Addictive drug found in cake

Discipline 7. Random Cards – 10, 30 and 60 Minute Disciplines

Aim

To commit to memory and recall as many separate packs (decks) of 52 playing cards as possible.

Note: there is a five to fifteen minute break between memorising and recall to allow for collection of the packs of cards.

Time	National (Speed)	International	World
To memorise	10 minutes	30 minutes	60 minutes
To recall	30 minutes	60 minutes	120 minutes

Memorisation

1. A number (specified by the competitor) of separate and individual shuffled packs (decks) of 52 playing cards.
2. The competitor must bring his/her own cards; these must be handed to the adjudicator for shuffling the day before the start of the World Memory Championships and before the competition commences on the day of a National/International competition.
3. The cards can be looked at repeatedly and more than one card can be looked at simultaneously.

4. The order of memorisation (top to bottom or bottom to top) should also be indicated. This can be done during memorisation or immediately after. Elastic bands and labels will be provided to the competitor for this purpose.
5. The packs must be numbered in sequence, initialed and bound with an elastic band.
6. Competitors hand in the memorised packs and indicate whether the last pack has been partially committed to memory.





















































































Recall

1. Competitors will be provided with Recall Papers – two decks per page.
2. If a competitor wishes to use his/her own Recall Papers, these must be handed in and approved by the Senior Arbiter before the competition.
3. Competitors must write down the order of each pack of cards so that the value (e.g. A, 2, 3....J.Q.K) and suit (Clubs, Diamonds, Hearts, and Spades) is clear for each card in each pack.
4. Competitors who use Arabian Memory Cards must write down the order of each pack of cards so that the value (0, 1, 2,) and suit (Earth, Wind, Fire and Water) is clear for each card in each pack.
5. Competitors must make it clear on their Recall Papers, to which pack the list of cards is referring to.

Scoring

1. 52 points are awarded for every pack (deck) correctly recalled.
2. 26 points are awarded if there is a single mistake written down (including missing cards).
3. 0 points are awarded if there are two or more mistakes.
4. In the case of two cards being transposed, this counts as two errors.
5. There is no penalty if not all decks are attempted.
6. For the last pack only: if the last pack is incomplete (e.g. only the first 38 cards were memorised) and all of the cards recalled are correct, then the points awarded will equal the number of cards recalled (38 in this example).
7. If the last pack is incomplete and there is one mistake, then the points awarded will equal half the number of cards recalled.
8. For an odd number of cards, the fraction is rounded up e.g. if 29 cards with one mistake, the score is divided by 2, $29/2 = 14.5$ and rounded up to 15.
9. Two or more mistakes in the last pack scores 0.

10. In the case of tied winning scores, the winner will be decided by looking at the extra decks the competitor has tried to recall but for which he/she got 0 points. For every correctly positioned card in that deck, 1 decision point will be given. The competitor with the most decision points is the winner.

Deck #			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			

Random Cards Recall Paper. 52 rows and printed in colour.

Discipline 8. Random Words

Aim

The aim is to commit to memory as many random words (e.g. dog, vase, guitar, etc. in complete columns of 20 words) as possible and recall them perfectly.

Time	National (Speed)	International	World
To memorise	5 minutes	15 minutes	15 minutes
To recall	15 minutes	30 minutes	30 minutes

Memorisation

1. A list of generally known words organised in columns of 20 words with 5 columns to a page. Approximately 80% concrete nouns, 10% abstract nouns and 10% infinitive verbs.
2. The words are sourced from an internationally recognised dictionary. This source document was chosen for its suitability for kids and junior competitors and a standard level of vocabulary for all adults.
3. Words that are spelt differently in some regions, such as English (UK) and English (USA) e.g. tire and tyre will be avoided. Words that are culturally specific or sensitive will also be avoided.
4. The number of words presented equals the current world record +20%.

5. Each column is separate. Competitors must start at the first word of column one and remember as many of the words (in that column) in order as possible.
6. Competitors may choose which column(s) to attempt.

Recall

1. Competitors must write down the list of words on the Recall Papers provided.
2. If a competitor wishes to use his/her own Recall Papers, these must be approved by the adjudicator before the competition.
3. Each word must be clearly numbered and the start and finish of each column of words easily identifiable.

Scoring

1. A point is awarded for every word in a complete column where all 20 words are correctly spelt.
2. The competitor may use upper or lower case letters.
3. One mistake (including plurals, gaps and synonyms) in a column of 20 words gives a score of 10 for that column (20/2).
4. Two or more mistakes in a column of 20 words scores 0 for that column.
5. There is no penalty for missing columns.

6. For the final column only. If the final column is partially complete, a point is awarded for each word if all are correctly spelt. One mistake in the partial column means the points awarded will equal half the number of words recalled. Two or more mistakes will score 0 for the column.
7. * If a word has been clearly memorised, but has been spelt incorrectly, no points are given for this word. It will not, however, cancel other words in a column. For example, if somebody writes 'rhythm' instead of 'rhythm', no points will be given for this word, and, if all other words in the column are correct, full marks minus one will be given for that column (e.g. 19).
8. Singular and plural mistakes count as a memory mistake.
9. If there is both one memory mistake in a column and a spelling mistake, then first the maximum points given for the column will be halved and then a point for the wrongly spelled word will be subtracted (e.g. max 20 points, divided by 2 gives 10 points, minus one is 9.)
10. To remember the order, follow the MouSe rule (developed by Gaby Kappus) which reminds us that it is the memorisation points that are deducted before the Spelling mistake. Otherwise, $9\frac{1}{2}$ points would be rounded back up to 10 with no penalty for a single spelling error.

11. The Total Points for all columns are added up. If the total includes a half mark, it is to be rounded up (72.5 points = 73 points) and the total is written at the top of the Recall Sheet.

12. In the case of tied winning scores, the winner will be decided by looking at the columns the competitor tried to recall but for which he/she got 0 points. For every correctly positioned word in that column, one decision point will be awarded. The competitor with the most decision points is the winner.

* This rule helps limit complications that may arise from spelling ambiguities, mistakes in translations, dyslexia, and handicaps for non-English speakers etc.

Translations

Translations are made available at the World Memory Championships and some National and International competitions on request with a minimum of one month's notice.

1 fish	21 encyclopedia	41 woodpecker	61 cheese	81 yak
2 hip	22 strudel	42 grape	62 yoghurt	82 cotton
3 magpie	23 airship	43 symbol	63 diagram	83 cow
4 opera	24 statue	44 hat	64 celery	84 dwarf
5 brother	25 accuse	45 calendar	65 frog	85 toucan
6 rat	26 glove	46 fountain	66 apple	86 tulip
7 Viking	27 mushroom	47 prawn	67 bean	87 ass
8 beard	28 trident	48 doily	68 bread	88 holster
9 scaffolding	29 envelope	49 anger	69 cinnamon	89 sausage
10 optician	30 notice	50 chestnut	70 amber	90 curry
11 stem	31 aerial	51 stomach	71 domino	91 gold
12 blast	32 grotto	52 excavator	72 etching	92 putty
13 herb	33 path	53 ice	73 impatience	93 song
14 fork	34 ammonia	54 conjurer	74 steel	94 outlaw
15 grass	35 blade	55 freezer	75 commerce	95 organ
16 emu	36 pelican	56 owner	76 autograph	96 quit
17 council	37 chemist	57 hair	77 porpoise	97 fleece
18 jockey	38 concrete	58 pearl	78 price	98 expand
19 koala	39 extinguisher	59 retina	79 convent	99 pen
20 aqueduct	40 lump	60 tooth	80 curtain	100 dress

Discipline 9. Spoken Numbers

Aim

To commit to memory and recall as many Spoken Numbers as possible.

Note: there is a break after the recall phase to allow for scoring of each attempt. Competitors are advised of their results before attempting the second and third trial.

Time	National (Speed)	International	World
To memorise	Attempt 1 - 100 seconds Attempt 2 - 300 seconds	Attempt 1 - 100 seconds Attempt 2 - 300 seconds Attempt 3 - world record +20%	Attempt 1 - 200 seconds Attempt 2 - 300 seconds Attempt 3 - world record +20%

To recall	Attempt 1 - 5 minutes Attempt 2 - 15 minutes	Attempt 1 - 10 minutes Attempt 2 - 15 minutes Attempt 3 - 20 minutes	Attempt 1 - 10 minutes Attempt 2 - 15 minutes Attempt 3 - 20 minutes
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Memorisation

1. Randomised decimal digits are broadcast via a software program and good quality speakers in English (e.g. 1, 5, 4, 8, etc) at a rate of one second per digit.
2. In the final trial of the World Memory Championships, the number of digits spoken equals the current world record +20%.
3. For non-English speaking International and National competitions only, the official/majority language may be used. At the discretion of the Event Organisers of Open competitions only, additional trials may be provided in English or the sole trial may be switched to English. Competitors may only participate in one set of languages.
4. No writing is allowed during the playing of the recording.
5. When a competitor has reached their memorising limit, they must stay quietly in their seats for the remainder of the recording.
6. If for some reason the attempt has to be paused due to an external distraction, the attempt will be continued from five numbers before the interruption. The extra recording will be played for the rest of the numbers to the target amount.

Recall

1. Competitors must use the Recall Papers provided.
2. If a competitor wishes to use his/her own Recall Papers, these must be approved by the adjudicator before the competition.
3. Competitors must write their recalled numbers in consecutive order from the start of the spoken sequence.
4. Competitors may have the Recall Papers for the discipline placed on the floor under their desks prior to the memorisation phase. Once the recording has finished and they are advised to do so by the Adjudicator, they may pick up the papers and begin the recall.



SpeedStacks Timers used in Speed Cards



Arbiter checking the memorised pack against the recall pack

Discipline 10. Speed Cards

Aim

To commit to memory and recall a single pack (deck) of 52 playing cards in the shortest possible time.

There are two attempts at this discipline with a 'fresh' deck provided at each trial.

Time	National (Speed)	International	World
To memorise	<5 minutes	< 5 minutes	< 5 minutes
To recall	5 minutes	5 minutes	5 minutes

Memorisation

1. A freshly shuffled pack (deck) of 52 playing cards. The competitor must provide his/her own cards; these must be shuffled by the adjudicator before the competition.
2. Competitors who expect to memorise the complete pack (deck) of cards in less than 5 minutes:
 - Must inform the adjudicator so that a timekeeper with a stopwatch (capable of measuring 1/100 of a second) can be assigned and
 - Must agree with their invigilator an appropriate signal that indicates they have finished memorising.

- Alternatively, a Speed Stacks timer may be used under supervision of an Arbiter/invigilator.
 - All mobile phones, iPads or similar mobile devices are banned from the competition room during this discipline.
3. Competitors may start memorisation at any point during 5 minute memorisation period.
 4. The cards can be looked at repeatedly and more than one card can be looked at simultaneously.
 5. The deck of cards must be in clear sight at all times – wrists must be kept at desk level wherever possible.
 6. Competitors must not begin recalling their pack until the adjudicator has announced that the 5 minute recall period has commenced.

Recall

After the memorising phase, each competitor gets a second pack of cards which is in perfect order (i.e. 2 Hearts, 3 Hearts, 4 Hearts, etc. and 0 Earth, 1 Earth, 2 Earth for Arabian Memory Cards). The competitor has to order this second deck of cards in the same sequence as the pack just memorised.

The packs will be clearly identified as the first or second (recall) pack. After the recall phase, both decks will be put beside each other on the table, the top card being the first one memorised.

Scoring

The Arbiter will compare each card from the memorised pack with each card of the recall pack. At the first discrepancy between the two packs, only the cards up to this point will be counted.

The competitor who correctly memorises all 52 cards in the quickest time wins the discipline.

If a competitor recalls less than 52 cards, the memorisation time (t) will be taken as 300 seconds and they will receive a score of $c/52$ points where c is the number of cards correctly recalled.

Scores will be calculated using the following formula for a complete deck of cards correctly memorised:

$11180/(\text{time to the power of } 0.75)$

This gives 1000 points for a deck recalled in 25 seconds.

The best score from the two attempts counts.

In the case of tied winning scores, the best score of the other trial will decide the winner.

Speed Stacks timer

Many tournaments (including the World Memory Championships) make use of Speed Stacks timers in which timing automatically starts when competitors remove either hand from touch sensitive panels. Timing stops when competitors replace both hands on the panels after memorising. Competitors may adapt Speed Stacks timers such that they may be stopped by one hand (e.g. by placing a weight on one pressure pad).

