# BIOMETRIC / IQ READY RECKONER BIOMETRIC INTELLIGENCE SCALE 

Devised by Greg A. Grove, Ph.D., Msc.D.

## Introduction

Dr. Max Freedom Long in his text Psychometric Analysis (DeVorss \& Co., 1959) suggests an innovative approach to quantify two factors of human intelligence-memory and reasoning-using the pendulum and his biometric chart (included with the book). Based on prior research by Dr. Oscar Brunler, Long provides approximate levels of intellectual and occupational performance throughout chapter 10, in relation to various ranges, from 200 to 725 degrees biometric. However, nowhere in the text does Long recommend a mathematical formula to convert conventional IQs to biometric equivalents or vice versa. By applying descriptive statistics to Long's biometric classifications in relation to cognitive and occupational functioning, I propose the following:

1) To transform IQ 100 or higher to an equivalent biometric, use:
( X - Mean) divided by 16 , times 80 , plus 250 , where $\mathrm{X}=$ the person's IQ, the Mean is the average IQ of the test population (e.g.100), the Standard Deviation is 16 , and the biometric average is 250 with a theoretical SD of 80. (Substitute 240 for 250 for individuals from undeveloped countries.) Round the answer to the nearest whole number.

Example: Joe, who attends high school in California, attained IQ 139 on the Stanford-Binet Intelligence Scale, Form L-M. Applying the formula above, you get (139-100) divided by 16, times 80 , plus $250=445$ biometric.
2) To transform IQ's below 100 to an equivalent biometic, use:
(X-100) divided by 16 , times 11 , plus 250 , where X is the person's IQ score -IQ 100 , divided by 16 SD , times factor 11 , plus 250 biometric. Round the answer to the nearest whole number.

Example: Linda, who is in a special class for the slow learner, has an IQ of 85. Thus, ( $85-100$ ) divided by 16 , times 11 , plus $250=240$ biometric.
3) To determine an IQ equivalent of a known biometric (240) 250 or higher, use: ( $\mathrm{X}-250$ ) times .2 , plus 100 , where X is the person's biometric minus 250 , times factor .2, plus
100 . Round to the nearest whole number.

Example: Lou is 367 biometric. Thus, (367-250) times .2 , plus $100=$ IQ $123(\mathrm{M}=100 ; \mathrm{SD}=16)$
4) To determine an IQ equivalent of a known biometric below 250 (240) use:
( $\mathrm{X}-250$ ) divided by 11 , times 16 , plus 100 , where X is the person's biometric reading minus 250 (the biometric average), divided by factor 11 , times 16 SD , plus 100 .
Round to the nearest whole number.

Example: Jan is 241 biometic. Thus,
(241-250) divided by 11 , times 16 , plus $100=$ IQ $87(\mathrm{M}=100 ; \mathrm{SD}=16)$
5) To determine a biometric reading based on any test result in which you know the Mean and Standard Deviation:
a. Take 80 and divide it by the SD of the test. This becomes the Factor number.
b. Then, use this formula:
(Score - Mean) times Factor, plus $250=$ biometric

Example: Henry scores 29 right on a college entrance test in which the group average was 14 and the standard deviation was 13.6. Thus, (29-14) times ( $80 / 13.6=5.88$ Factor), plus $250=$ biometric 338.2 or simply 338 rounded to the nearest whole number.

Biometric Intelligence Scale
Devised by G. A. Grove, Ph.D.
Second Revision © 2001

Name: $\qquad$ Date of Test: $\qquad$ Age: $\qquad$
Address: $\qquad$

Home Phone: ( ) $\qquad$ Work / Cell Phone: ( ) $\qquad$

Highest Grade Completed: 123456 Elementary JrHigh H. S. Junior C. Bachelor's Master's Doctor's

Directions: You are to figure out which word or number does not belong and " X " it out. Take each line and work across the page, from left to right. Do each set in order; do not skip. Do not waste time on difficult items. Do the best you can and quickly go on to the next set. Your score is the number of correctly answered sets in 10 minutes. Ready? BEGIN!

| boy | dog | cat | doll | rat |
| :--- | :--- | :--- | :--- | :--- |
| rock | mud | air | sand | dirt |
| lily | tree | bird | apple | egg |
| finger | leg | arm | toe | ear |
| 16 | 11 | 4 | 8 | 2 |
|  |  |  |  |  |
| has | his | hers | ours | its |
| lion | frog | tiger | dog | cow |
| 20 | 6 | 15 | 18 | 4 |
| fish | bird | crawl | hop | snake |
| up | from | down | to | around |
|  |  |  |  |  |
| right | in | came | out | left |
| please | tell | me | go | with |
| apple | peach | pear | beet | plum |
| will | could | can't | can | won't |
| which | why | high | down | under |
|  |  |  |  |  |
| worse | when | better | wrong | good |
| is | were | are | be | was |
| 6 | 9 | 11 | 15 | 18 |
| bread | sheep | fruit | meat | tree |
| this | them | those | that | these |
|  |  |  |  |  |
| get | give | got | gave | go |
| his | who | what | name | is |
| bark | stars | tree | leaf | nuts |
| above | off | under | on | in |
| come | go | stay | hop | run |


| too | that | a | also | an |
| :--- | :--- | :--- | :--- | :--- |
| you | kiss | will | no | me |
| we | can | you | they | is |
| help | we | them | chair | can |
| 19 | 5 | 4 | 25 | 16 |
|  |  |  |  |  |
| apple | grape | plum | cherry | pear |
| store | chalk | mother | teacher | child |
| sleep | skate | run | swim | jump |
| milk | ice | store | water | cream |
| teeth | jaws | ear | mouth | lips |
|  |  |  |  |  |
| 29 | 27 | 14 | 30 | 23 |
| big | ever | never | little | often |
| give | shoe | me | gave | your |
| head | hand | hair | arm | finger |
| 19 | 9 | 14 | 8 | 11 |

Score: $\qquad$ IQ: $\qquad$ \%ile: $\qquad$ MA: $\qquad$ GE: $\qquad$

Biometric / IQ Conversion Chart

| Biometric* | IQ*8 | Percentile/*** | Rarity (1/x) | M.A. | Grade Equiv./ BIS raw score | Educational Class |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 190 | 13 | --- | --- | --- | --- | Severe Retard |
| 191 | 14 | --- | --- | --- | --- | (Trainable?) |
| 192 | 16 | --- | --- | --- | --- |  |
| 193 | 17 | --- | --- | --- | --- |  |
| 194 | 19 | --- | --- | --- | --- |  |
| 195 | 20 | --- | 3,500,000 | --- | --- | Moderate Retard |
| 196 | 21 | --- | 2,500,000 | --- | --- | (Trainable) |
| 197 | 23 | --- | 1,300,000 | --- | --- |  |
| 198 | 24 | --- | 1,000,000 | --- | --- |  |
| 199 | 26 | --- | 500,000 | --- | --- |  |
| 200 | 27 | --- | 400,000 | --- | --- |  |
| 201 | 29 | --- | 220,000 | --- | --- |  |
| 202 | 30 | --- | 160,000 | --- | --- |  |
| 203 | 32 | --- | 90,000 | --- | --- |  |
| 204 | 33 | --- | 70,000 | --- | --- /1 |  |
| 205 | 35 | --- | 40,000 | --- | --- |  |
| 206 | 36 | --- | 30,000 | --- | --- |  |
| 207 | 37 | --- | 24,000 | --- | --- |  |
| 208 | 39 | --- | 15,000 | --- | -- |  |
| 209 | 40 | --- | 11,000 | --- | --- /2 |  |
| 210 | 42 | --- | 7,000 | --- | --- |  |
| 211 | 43 | . 01 | 5,000 | --- | --- |  |
| 212 | 45 | . 03 | 3,400 | --- | --- /3 |  |
| 213 | 46 | . 04 | 2,700 | --- | --- |  |
| 214 | 48 | . 06 | 1,700 | --- | --- |  |
| 215 | 49 | . 07 | 1,400 | --- | --- /4 |  |


| 216 | 51 | . 11 | 900 | 8-3 | 3.0 | Mild Retard |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 217 | 52 | . 13 | 700 | 8-5 | 3.1 | (Educable) |
| 218 | 53 | . 17 | 600 | 8-6 | $3.2 / 5$ |  |
| 219 | 55 | . 25 | 400 | 8-10 | 3.6 |  |
| 220 | 56 | . 30 | 340 | 9-0 | $3.7 / 6$ |  |
| 221 | 58 | . 43 | 230 | 9-4 | 4.1 |  |
| 222 | 59 | 1 | 190 | 9-6 | 4.2 |  |
| 223 | 61 | 1 | 140 | 9-10 | $4.6 / 7$ |  |
| 224 | 62 | 1 | 110 | 9-11 | 4.7 |  |
| 225 | 64 | 1 | 80 | 10-3 | $5.0 / 8$ |  |
| 226 | 65 | 1 | 70 | 10-5 | 5.2 |  |
| 227 | 67 | 2 | 50 | 10-9 | $5.5 / 9$ |  |
| 228 | 68 | 2 | 44 | 10-11 | 5.6 |  |
| 229 | 69 | 3 | 38 | 11-1 | $5.8 / 10$ |  |
| 230 | 71 | 4 | 29 | 11-5 | 6.1 | Borderline |
| 231 | 72 | 4 | 25 | 11-7 | $6.2 / 11$ | (Slow Learner) |
| 232 | 74 | 5 | 19 | 11-11 | 6.6 |  |
| 233 | 75 | 6 | 17 | 12-0 | $6.7 / 12$ |  |
| 234 | 77 | 8 | 13 | 12-4 | $7.0 / 13$ |  |
| 235 | 78 | 8 | 12 | 12-6 | 7.2 |  |
| 236 | 80 | 11 | 9.5 | 12-10 | $7.5 / 14$ | Dull |
| 237 | 81 | 12 | 8.5 | 13-0 | 7.7 | (Slow Learner) |
| 238 | 83 | 14 | 6.9 | 13-4 | $8.0 / 15$ |  |
| 239 | 84 | 16 | 6.3 | 13-6 | 8.2 |  |
| 240 | 85 | 17 | 5.7 | 13-8 | $8.3 / 16$ |  |
| 241 | 87 | 21 | 4.8 | 13-11 | 8.6 |  |
| 242 | 88 | 23 | 4.4 | 14-1 | $8.7 / 17$ |  |
| 243 | 90 | 27 | 3.8 | 14-5 | 9.0 |  |
| 244 | 91 | 29 | 3.5 | 14-7 | $9.1 / 18$ |  |
| 245 | 93 | 33 | 3.0 | 14-11 | 9.4 |  |
| 246 | 94 | 35 | 2.8 | 15-1 | $9.6 / 19$ |  |
| 247 | 96 | 40 | 2.5 | 15-5 | 9.8 |  |
| 248 | 97 | 43 | 2.3 | 15-7 | $10.0 / 20$ |  |
| 249 | 99 | 48 | 2.1 | 15-11 | 10.2 |  |
| 250 | 100 | 50 | 2.0 | 16-0 | $10.3 / 21$ | AVERAGE |
| 255 | 101 | 52 | 2.1 | 16-2 | 10.4 |  |
| 260 | 102 | 55 | 2.2 | 16-4 | $10.5 / 22$ |  |
| 265 | 103 | 57 | 2.3 | 16-6 | 10.7 |  |
| 270 | 104 | 60 | 2.5 | 16-8 | 11.5 | H.S. Grad |
| 275 | 105 | 62 | 2.7 | 16-10 | $12.5 / 23$ |  |
| 280 | 106 | 65 | 2.8 | 17-0 | 12.8 |  |
| 285 | 107 | 67 | 3.0 | 17-2 | $13.0 / 24$ |  |
| 290 | 108 | 69 | 3.2 | 17-4 | 13.2 |  |
| 295 | 109 | 71 | 3.5 | 17-6 | 13.4 |  |
| 300 | 110 | 73 | 3.8 | 17-8 | $13.6 / 25$ | 2 yr. College Grad |
| 305 | 111 | 75 | 4.1 | 17-10 | 13.8 | Bright Normal |
| 310 | 112 | 77/-1 | 4.4 | 18-0 | 14.0 |  |
| 315 | 113 | 79 / 1 | 4.8 | 18-2 | $14.3 / 26$ |  |
| 320-113.9 | 114 | $81 / 2$ | 5.2 | 18-3 | 14.5 |  |
| 325-114.9 | 115 | $83 / 4$ | 5.7 | 18-5 | 14.8 |  |
| 330-115.8 | 116 | $84 / 5$ | 6.3 | 18-7 | $15.0 / 27$ | 4 yr. College Grad |


| 335-116.8 | 117 | $86 / 8$ | 6.9 | 18-9 | 15.5 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 340-117.6 | 118 | $87 / 10$ | 7.7 | 18-11 | $15.7 / 28$ | Nasser |
| 345-118.5 | 119 | 88/13 | 8.5 | 19-1 | 16.2 |  |
| 350-119.4 | 120 | $89 / 21$ | 9.5 | 19-3 | $16.5 / 29$ |  |
| 355-120.3 | 121 | $90 / 27$ | 11 | 19-5 | 16.6 | Superior |
| 360-121.2 | 122 | 92 / 29 | 12 | 19-7 | 16.7 |  |
| 365-122.0 | 123 | $93 / 40$ | 13 | 19-9 | $16.8 / 30$ | Mao Tse-Tung |
| 370-122.9 | 124 | $93 / 46$ | 15 | 19-11 | G50**** | Khrushchev |
| 375-123.8 | 125 | 94 / 50 | 17 | 20-1 | G53 | F. D. Roosevelt |
| 380-124.6 | 126 | 95 / 55 | 19 | 20-2 | G56 /31 |  |
| 385-125.4 | 127 | 95 / 59 | 22 | 20-4 | G60 | Ph.D., M.D. ave. |
| 390-126.3 | 128 | 96 / 67 | 25 | 20-6 | G63 |  |
| 395-127.1 | 129 | 96 / 68 | 29 | 20-8 | G66 |  |
| 400-127.9 | 130 | 97 / 71 | 33 | 20-10 | G70 /32 |  |
| 405-128.8 | 131 | $97 / 75$ | 38 | 21-0 | G72 |  |
| 410-129.6 | 132 | 98/79 | 44 | 21-2 | G75 | Very Superior |
| 415-130.4 | 133 | $98 / 80$ | 50 | 21-4 | G77 /33 | Mensa |
| 420-131.2 | 134 | 98/81 | 60 | 21-6 | G80 |  |
| 425-132.0 | 135 | 99 / 82 | 70 | 21-8 | G83 | Abe Lincoln |
| 430-132.7 | 136 | 99 / 84 | 80 | 21-10 | G86 /34 | G. Washington |
| 435-133.5 | 137 | 99 / 86 | 100 | 22-0 | G89 |  |
| 440-134.3 | 138 | 99.1 / 90 | 110 | 22-2 | G90 |  |
| 445-135.1 | 139 | 99.3 / 92 | 140 | 22-3 | G91/35 |  |
| 450-135.8 | 140 | 99.4 / 93 | 160 | 22-5 | G92 | Near Genius |
| 455-136.6 | 141 | 99.5 / 95 | 190 | 22-7 | G93 /36 |  |
| 460-137.4 | 142 | 99.6 / 97 | 230 | 22-9 | G93 |  |
| 465-138.1 | 143 | 99.6 / 99 | 280 | 22-11 | G94 |  |
| 470-138.8 | 144 | 99.7 / 99+ | 340 | 23-1 | G94 /37 | Thomas Edison |
| 475-139.6 | 145 | 99.8 | 400 | 23-3 | G95 |  |
| 480-140.3 | 146 | 99.8 | 500 | 23-5 | G95 |  |
| 485-141.0 | 147 | 99.8 | 600 | 23-7 | G95 /38 |  |
| 490-141.8 | 148 | 99.9 | 700 | 23-9 | G96 | Madame Curie |
| 495-142.5 | 149 | 99.9 | 900 | 23-11 | G96 |  |
| 500-143.2 | 150 | 99.91 | 1,100 | 24-1 | G96 /39 | Genius |
| 505-143.9 | 151 | 99.93 | 1,400 | 24-2 | G97 | Emerson |
| 510-144.6 | 152 | 99.94 | 1,700 | 24-4 | G97 |  |
| 515-145.3 | 153 | 99.95 | 2,200 | 24-6 | G97 |  |
| 520-146.0 | 154 | 99.96 | 2,700 | 24-8 | G98 /40 |  |
| 525-146.7 | 155 | 99.97 | 3,400 | 24-10 | G98 | Kipling |
| 530-147.4 | 156 | 99.977 | 4,000 | 25-0 | G99 |  |
| 535-148.1 | 157 | 99.982 | 5,000 | 25-2 | G99.2 | Haydn, Liszt |
| 540-148.7 | 158 | 99.986 | 7,000 | 25-4 | G99.3 | Charles Dickens |
| 545-149.4 | 159 | 99.989 | 9,000 | 25-6 | G99.4 |  |
| 550-150.1 | 160 | 99.991 | 11,000 | 25-8 | G99.5 | Chopin |
| 555-150.7 | 161 | 99.993 | 15,000 | 25-10 | G99.6 |  |
| 560-151.4 | 162 | 99.995 | 19,000 | 26-0 | G99.7 |  |
| 565-152.1 | 163 | 99.996 | 24,000 | 26-2 | G99.8 |  |
| 570-152.7 | 164 | 99.997 | 30,000 | 26-4 | G99.9 |  |


| $575-153.4$ | 165 | 99.9976 | 40,000 | $26-5$ | G99.9+ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $580-154.0$ | 166 | 99.9981 | 50,000 | $26-6$ | --- |


| 585-154.7 | 167 | 99.9986 | 70,000 | 26-9 | ---- |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 590-155.3 | 168 | 99.9989 | 90,000 | 27-0 | ---- |  |
| 595-155.9 | 169 | 99.9992 | 120,000 | 27-1 | ---- |  |
| 600-156.6 | 170 | 99.9994 | 160,000 | 27-3 | ---- |  |
| 605-157.2 | 171 | 99.9995 | 220,000 | 27-4 | ---- |  |
| 610-157.8 | 172 | 99.99966 | 300,000 | 27-6 | ---- |  |
| 615-158.4 | 173 | 99.99975 | 400,000 | 27-8 | ---- |  |
| 620-159.0 | 174 | 99.99981 | 500,000 | 27-10 | ---- |  |
| 625-159.6 | 175 | 99.99986 | 700,000 | 28-0 | ---- |  |
| 630-160.3 | 176 | 99.99990 | 1,000,000 | 28-2 | ---- |  |
| 635-160.9 | 177 | 99.99993 | 1,300,000 | 28-4 | ---- | Rembrandt |
| 640-161.5 | 178 | 99.99995 | 1,800,000 | 28-6 | ---- |  |
| 650-162.1 | 179 | 99.99996 | 2,500,000 | 28-8 | ---- |  |
| 655-162.6 | 180 | 99.99997 | 3,500,000 | 28-10 | ---- |  |
| 660-163.6 | 181 | 99.99998 | 5,000,000 | 29-0 | ---- | Titian |
| 665-163.8 | 182 | 99.999985 | 7,000,000 | 29-2 | ---- |  |
| 670-164.4 | 183 | 99.999989 | 9,000,000 | 29-4 | ---- |  |
| 675-165.0 | 184 | 99.999992 | 13,000,000 | 29-6 | ---- |  |
| 680-165.6 | 185 | 99.999995 | 20,000,000 | 29-8 | ---- |  |
| 685-166.1 | 186 | 99.999996 | 30,000,000 | 29-10 | ---- |  |
| 670-166.7 | 187 | 99.999997 | 40,000,000 | 30-0 | ---- |  |
| 675-167.3 | 188 | 99.999998 | 50,000,000 | 30-3 | ---- |  |
| 680-167.9 | 189 | 99.9999987 | 80,000,000 | 30-6 | ---- |  |
| 685-168.4 | 190 | 99.9999991 | 110,000,000 | 30-9 | ---- |  |
| 690-169.0 | 191 | 99.9999994 | 150,000,000 | 31-0 | ---- |  |
| 695-169.5 | 192 | 99.9999996 | 220,000,000 | 31-1 | ---- |  |
| 700-170.1 | 193 | 99.9999997 | 300,000,000 | 31-3 | ---- |  |
| 705-170.6 | 194 | 99.9999998 | 500,000,000 | 31-5 | ---- |  |
| 710-171.2 | 195 | 99.99999985 | 700,000,000 | 31-6 | ---- |  |
| 715-171.7 | 196 | 99.99999990 | 1,000,000,000 | 31-8 | ---- |  |
| 720-172.3 | 197 | 99.99999993 | 1,500,000,000 | 31-9 | ---- |  |
| 725-172.8 | 198 | 99.99999995 | 2,000,000,000 | 31-10 | ---- | Da Vinci |
| 730-173.4 | 199 | 99.99999997 | 3,000,000,000 | 31-11 | ---- |  |
| 735-173.9 | 200 | 99.99999998 | 5,000,000,000 | 32-0 | ---- |  |
| 740-174.4 | 201 | 99.999999986 | 7,000,000,000 | 32-2 | ---- |  |
| 745-174.9 | 202 | 99.999999991 | 11,000,000,000 | 32-3 | ---- |  |
| 750-175.5 | 203 | 99.999999994 | 15,000,000,000 | 32-5 | ---- |  |
| 1000-197.7 | 250 | --- | --- | -- | --- | Shroud of Turin |

* $\mathrm{M}=100 \mathrm{SD}=16$
** IQ adjusted for Flynn Effect
* ** Huna Research Associates, The Huna Work, No. 66, Novermber 2000
**** College Graduate Percentile Rank

