## INDIVIDUAL POINTS

5 , 4, and 3 points will be awarded to the 1 st , 2 nd , and 3rd place male and female runners in each of the 4 age divisions.

## TEAM SCORING

No gender requirements and although we allow 10 employees per team to participate, only the eight (8) best times for a team will count towards the team score. Each team must have at least four (4) runners in order to qualify for team points. Any team with less than four (4) runners registered will automatically get the minimum of 10 team points earned. All individual runners will still qualify for individual points earned.

After the team scores are computed and adjusted with the formula, we will then rank teams in order from $1^{\text {st }}$ to $10^{\text {th }}$ to then officially award points based off the 100-point system ranking scale. 100 points will be awarded to the 1st place team, 90 points will be awarded to the 2 nd place team and points will move down incrementally by 10 until the 8th place team has been awarded 30 points. All teams that finish below 8 th place will be awarded 10 points.

## TEAM SCORING FORMULA TO WEIGH AGE AND GENDER - WAVA SCORING

How is the 5 K run scored?

- Scoring for a team is computed through the WAVA Table of Factors that adjusts a runner's time based on age, gender, and distance. Female runners are adjusted more than male runners. With gender in the calculation, the results are age-graded among the other runners in that age group which then are sorted from fastest to slowest to determine individual runner results
- By having age-graded times, companies that do not have males in their late teens or early 20s are not put at a disadvantage to companies that do in other words, females and older runners can be competitive

WAVA created a table of factors to adjust a runner's time to that of the fastest running time, which, statistically, was determined to be achieved by a 20 year old male. WAVA factors vary based on age, gender and distance. The older a runner is, the more the adjustment. Female runners are adjusted more than male runners.

Effectively, age-grading compares a runner to the best world-class runner of that same age and sex.

Here is an example of 2 runners... Say you have a 90 year old female who finished a 5 K in 40 minutes and a 20 year old male who finished the same 5 K in 20 minutes. The following is how these two runners compare to each other according to WAVA:

| Actual |  | World Class | Ratio of Actual Time |
| :---: | :---: | :---: | :---: |
| Age Gender | Time | WAVA Time | to WAVA Time |
|  | (A) | (B) | (C) |


| 90 | $F$ | 40 Min | 29 Min 3 Sec | 1.377 |
| :--- | :--- | :--- | :--- | :--- |
| 20 | $M$ | 20 Min | 12 Min 59 Sec | 1.540 |

The 90 year old female ran 37.7\% slower than a world-class 90 year old female and the 20 year old male ran $54.0 \%$ slower than a world-class 20 year old male. The 90 year old female has a lower ratio of actual time to WAVA time as compared to the ratio of the 20 year old male's actual time to WAVA time. Therefore, the 90 year old female is the winner between these two runners.

Here is a different way to look at results. In the following example, using a different methodology, but still using WAVA factors, the 90 year old female still has a lower WAVA adjusted time. The process below is the process most, if not all, people (timers, coaches, runners, etc.) use when calculating "age-graded" times. Both methodologies always give the same results.

|  | Actual |  |  |  | Best WAVA |
| :---: | :---: | :---: | :---: | :---: | :---: | | World-Class |
| :---: | WAVA Age-

As you can see, the 90 year old female still won based on age-graded WAVA times. This second method is the process I use but as I stated above, both methods give the same answer. The reason I use the second process is because it calculates age-graded WAVA times; "elite" runners are accustomed to the second methodology.

In the example I provided, a 20 year old male can rank higher than a 90 year old female if the 20 year old male's time is, for example, 5\% slower than the fastest 20 year old male (world-class WAVA Time) and the 90 year old female is $10 \%$ slower than the fastest time for a 90 year old female (world-class WAVA Time). In other words, a runner has to be very fast for their age to rank above all the other runners of any age or sex.

All the times for corporate teams are age-graded when doing San Antonio Sports team results. For the individual's results you provided in your email below, the 40-49 year old female's actual chip time was 23 Min 27 Sec and her age-graded time was 19 Min 50 Sec. After all the times are age-graded, the age-graded times are sorted from fastest to slowest. The 40-49 year old female in the example you provided, came in $18^{\text {th }}$ place after the age-grading and $47^{\text {th }}$ place before the age-grading.

By having age-graded times, companies that do not have males in their late teens or early 20s are not put at a disadvantage to companies that do have young fast males running in their event; in other words, females and older runners can compete competitively.

