## Mathe cad tics

Mathematics are part of our everyday life.
Numbers and figures are all around us. I am interested and involved in the GAA. I play for Newry Shamrocks and I am a Down
Supporter . I would like to show how numbers are important on the pitch and off the pitch. There are a few basic facts on how mathematics are central in the rules.

## Match Time

A juvenile game is 50 minutes and a senior game is [club] 60 minutes and [inter county] 70 minutes. There is also additional time
which is about 2-5 minutes.


## Player Lineout

Numbers on players: The numbers reflect what position you are playing in the field. The goalkeeper [1] to the corner forward [15].

- Nos 1,3,5,7,9,11,13,15 are odd numbers
- Nos 2,4,6,8,10,12,14 are even number
- Nos2,3,5,7,11.13 are prime numbers
- Nos1 ,4,9 are square numbers



## Stadiums

Our National Stadium is Croke Park in Dublin, approximately 70 miles from Newry.

It is the $3^{\text {rd }}$ largest stadium in Europe.
It has been used to host GAA games from 1884. ( over 132 years old)

The stadium has a capacity for safety issues.
Croke Park has the biggest capacity with 82,300. Pairc Esler has a 20,000 capacity.

- There are 2,610 GAA clubs in the World [2015].
- There are 2319 GAA clubs in Ireland [2015].
- There are 50 GAA clubs in Down.


## What is the shape of a GAA pitch?

The shape of a GAA pitch is a rectangle. The perimeter of Croke Park measures 144 by 86 metres which exceeds soccer and rugby pitches. Pairc Esler measures 138 by 81 metres.

- The ball is a sphere
- There are 2 squares and a semi-circle at the goal mouth area.
- There are 5 horizontal lines which divide the pitch into $5 \times 1 / 5=1$ whole pitch .
- There are 2 goal posts. Each has 2 vertical poles and 1 horizontal crossbar.



## The All Ireland Championship

The Championship is divided into 4 provinces.

1. Mayo, Galway,
Rosscommon, Sligo, Leitrim,( London and
New York )also compete = 7 County teams
2. Leinster:Dublin, Kildare, Westmeath, Meath, Wexford, Wicklow, Offaly, Longford, Laois, Louth, Carlow, (Kilkenny are in Leinster but don't compete in football) = 11 County Teams.
3. Munster:Kerry, Cork, Clare, Tipperary, Limerick and Waterford = 6 County teams.
4. Ulster:Tyrone, Donegal, Monaghan,

Down, Armagh, Fermanagh,Antrim,
Cavan, Derry = 9 County teams


## The GAA scoring system

In Gaelic football and hurling there are two types of score a goal and a point. If you hit the ball over the bar and between the posts it counts as 1 point. If you hit the ball under the bar and into the net it counts a 3 points.

In the 2015 All- Ireland hurling final the score was Kilkenny 1-22 [25] to Galway 1-18 [21]. In the All- Ireland football final the score was Kerry 0-09 [9] to Dublin 0-12[12].

| LEAGUE TABLE | P | $\mathbf{w}$ | L | D | F | A | POINIE |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| POS TEAM | 4 | 4 | 0 | 0 | 81 | 48 | 8 |  |
| 1 | DUBLIN | 4 | 3 | 1 | 0 | 53 | 51 | 6 |
| 2 | TYRONE | 4 | 3 | 1 | 0 | 63 | 66 | 6 |
| 3 | KILDARE | 4 | 2 | 2 | 0 | 55 | 49 | 4 |
| 4 | DONEGAL | 4 | 2 | 2 | 0 | 62 | 65 | 4 |
| 5 | CORK | 4 | 1 | 3 | 0 | 51 | 58 | 2 |
| 6 | DOWN | 4 | 1 | 3 | 0 | 56 | 57 | 2 |
| 7 | MAYO | 4 | 0 | 4 | 0 | 31 | 58 | 0 |
| 8 | KERRY |  |  |  |  |  |  |  |

## Conclusion

I have tried to show how central maths is in the GAA. When I'm outside and my Mummy says: "You're playing too much football". I will reply: "I'm doing matheGAAtics!!!!!"

all-irelano

The End

## By Terry Rafferty

