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PUPIL WORKSHEETS  
**MATHS**

**3**

- 3A: Place Value
- 3B: Fractions
- 3C: Decimals and Percentages
- 3D: Decimals and Percentages
- 3E: Equations
- 3F: Time
- 3G: Money
- 3H: Data
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Module

**3**

**WORKSHEETS** **3A** to **3K**

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## Worksheet 3A: Place Value

(1a)

GAA Match	Attendance	Round to the Nearest 10	Round to the Nearest 100	Round to the Nearest 1000
Cork v Wexford	54,607			
Dublin v Meath	48,602			
Laois v Offaly	23,415			
Mayo v Kerry	52,119			
Kilkenny v Cork	79,874			

(b) Using the above attendances order the attendances from the least attended to the most attended match.

\_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

(2) Stadium Seating Capacity

Nowlan Park, Kilkenny	30,000
Croke Park, Dublin	80,000
Páirc Uí Chaoimh, Cork	43,500
Semple Stadium, Thurles	55,000
St Tiernach's Park, Clones	33,000
St. Jarlath's Stadium, Tuam	25,000
McHale Park, Castlebar	34,000

(a) Write out these venues in order of seating capacity starting with the stadium with the highest capacity. Read out your list for the pupil sitting beside you and see if they are the same.

\_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

(b) Write a number that is between the seating capacities of Clones and Castlebar

Stadia \_\_\_\_\_



## Worksheet 3B: Fractions

(1) The seating capacity in Nowlan Park is 30,000. If a match took place when the stadium was filled to  $\frac{2}{3}$  of its capacity how many spectators were present?

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(2) There are 12,000 people at the league Semi-Finals. Dublin play Wexford in the first Semi-Final. Kilkenny versus Laois follows this in the second Semi-Final. The attendance is calculated to the nearest thousand as follows:

- Dublin                      4,000
- Wexford                    5,000
- Laois                        1,000
- Kilkenny                   2,000

Remember get a common denominator when subtracting fractions!

(a) What fraction of the crowd support Dublin? \_\_\_\_\_

(b) What fraction of the crowd support Wexford? \_\_\_\_\_

(c) What fraction of the crowd support Laois? \_\_\_\_\_

(d) What fraction of the crowd support Kilkenny? \_\_\_\_\_

(e) Finding a common denominator, order the fractions from smallest to largest and place them on the line below:

Smallest \_\_\_\_\_ largest

(3) (a) If Wexford supporters make up  $\frac{1}{2}$  of the attendance and Dublin supporters  $\frac{1}{5}$  calculate the difference in attendance.

(b) If Dublin supporters make up  $\frac{2}{3}$  of the crowd and Laois make up  $\frac{1}{4}$  of the crowd calculate the difference between the Dublin and Laois crowd.



\_\_\_\_\_

\_\_\_\_\_

(c) If Cork supporters make up  $\frac{1}{2}$  of the crowd and Kilkenny supporters make up  $\frac{3}{8}$  of the crowd calculate the difference between the Cork and Kilkenny crowd.

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## Worksheet 3C: Decimals and Percentages

(1) The All Star team has a panel of 15 players.

The following teams have a number of All Star players;

- Kilkenny: 2
- Galway: 4
- Cork: 6
- Clare: 1
- Antrim: 2

What fraction of the All Star team is made up of each county?

(a) Kilkenny: \_\_\_\_\_

(b) Galway: \_\_\_\_\_

(c) Cork: \_\_\_\_\_

(d) Clare: \_\_\_\_\_

(e) Antrim: \_\_\_\_\_

(2) Using the above fractions what percentage of the All Star team is represented by each county?

(a) Kilkenny: \_\_\_\_\_

(b) Galway: \_\_\_\_\_

(c) Cork: \_\_\_\_\_

(d) Clare: \_\_\_\_\_

(e) Antrim: \_\_\_\_\_

(3) If Páirc Uí Chaoimh was filled to 50% of its seating capacity how many spectators would there be if the capacity is 43,500.

\_\_\_\_\_

**\*Remember: when we want to change a fraction to a percentage we multiply it by  $\frac{100}{1}$**



## Worksheet 3D: Decimals and Percentages

- (1) Croke Park is almost filled to capacity with an attendance of 75,000 people.  
All-Ireland day sees two finals. The senior final is Cork versus Waterford. The minor final is Galway versus Clare

The supporters are as follows rounded to the nearest thousand:

- Waterford: 20,000
- Cork: 30,000
- Clare: 10,000
- Galway: 15,000

- (a) What percentage of the crowd are Cork supporters? \_\_\_\_\_
- (b) What percentage of the crowd are Waterford supporters? \_\_\_\_\_
- (c) What percentage of the crowd are Galway supporters? \_\_\_\_\_
- (d) What percentage of the crowd are Clare supporters? \_\_\_\_\_
- (e) Who had the most support on the day? \_\_\_\_\_
- (f) Who had the least support on the day? \_\_\_\_\_

**\*Remember make the number a fraction first and then multiply it by  $\frac{100}{1}$**

### Problem Solving

- (1) An All-Ireland ticket costs €60. If students and O.A.P.'s get a 20% discount how much does each ticket actually cost them? \_\_\_\_\_
- (2) Tickets for the charity G.A.A. match are priced at €8.  
Under 14's go free.  
There are 30,000 people at the match.  
If 10% of the crowd are under 14, how much money does the G.A.A. lose out on? \_\_\_\_\_
- (3) Mattie Forde scored 4 out of the 12 points scored by Wexford.  
What (a) fraction, (b) percentage and (c) decimal of the points did he score? \_\_\_\_\_
- (4) The attendance at the Semi Final is 50,000.  
If 35% of the crowd are children how many children attended the match? \_\_\_\_\_
- (5) Each Leinster Final Ticket costs €30. The G.A.A. make a profit of 20% on each ticket. How much profit does the G.A.A. make on each ticket? \_\_\_\_\_



Worksheet 3E: Equations - *Remember a goal is worth 3 points!*

Write each of these word problems as an equation using an empty frame or letter as the unknown. Then find the value of the unknown amount.

- (i) Mattie Forde scored 3 goals and 5 points, how many points did he score altogether?
- (ii) There were 25 players selected. Only 21 can be picked to be on the panel. How many players were dropped?
- (iii) A box contained 75 oranges. If each player got 3 oranges, how many players were there?
- (iv) The bus can hold 52 people. If there are 312 supporters how many buses are needed?
- (v) Cork are in the lead by 6 points. If Clare have scored 3 goals and 2 points, what is Corks score?

Write each of these equations as a word problem and calculate the unknown.

- (vi)  $12 \div 3 =$  \_\_\_\_\_
- (vii)  $52 \times 6 =$  \_\_\_\_\_
- (viii)  $3(3) + 5 =$  \_\_\_\_\_
- (ix)  $30 - 9 =$  \_\_\_\_\_

Solve the following problems.

- (i) The numbers on the jerseys of direct opponents in a hurling match add up to 17.
- (a) What numbered player marks no. 3? \_\_\_\_\_
- (b) What numbered player marks no. 6? \_\_\_\_\_
- (c) What numbered player marks no. 11? \_\_\_\_\_
- (ii) The numbers on the jerseys of direct opponents in a camogie match add up to 14.
- (a) What numbered player marks no. 5? \_\_\_\_\_
- (b) What numbered player marks no. 10? \_\_\_\_\_
- (c) What numbered player marks no. 2? \_\_\_\_\_



## Worksheet 3F: Time

Solve the following problems:

1. A championship match started at 3.45pm. Each half was 35 minutes long and there was to be a 15-minute interval. At what time should the match be over?
2. The train left Wexford at 7.35am. It arrived in Dublin at 10.20am. How long were the supporters travelling for?
3. The team bus arrives 1 hour and 15 minutes before throw-in. Throw-in is scheduled for 3.30pm. At what time did the bus arrive at?
4. The Galway supporters left Galway at 8:35 and arrived in Dublin at 11:23 on All-Ireland day. They returned victoriously to Galway that evening leaving Dublin at 18:15 and arriving at 21:12. How long altogether did they Galway supporters travel for?
5. The centenary of the first public camogie match occurred in 2004. In what year was the first camogie match played? In what century was that?
6. The first hurling All-Ireland was held in 1887. One was held every year since then, except in 1888. How many All-Ireland finals have there been to date?
7. If a sliotar travels 65 metres in 3 seconds what speed is it travelling at?

**(Remember speed = distance ÷ time)**

All - Ireland day has arrived.

Throw-in for the hurling final is scheduled for 15.45 Irish time. Cork have supporters in all parts of the world. Using the table below calculate the throw-in times for the different time zones:

Ireland throw-in	Difference in time zone	Throw-in
15.45	<b>U.S.A.</b> -8 hours	
15.45	<b>France</b> +1 hour	
15.45	<b>Australia</b> +9 hours	
15.45	<b>Iceland</b> -3 hours	

Ireland throw-in Difference in time zone



## Worksheet 3G: Money

- (1) Each Munster final ticket costs €35. Students and O.A.P.'s get 20% discount. How much cheaper are student and O.A.P. tickets?
- (2) A family ticket for 2 adults and 4 children costs €120. Normally tickets are €30 per person. How much money does the family ticket save?
- (3) Tickets are sold for €25. The Cusack stand refunds €15 to students when they show a valid student card. What percentage of the money are students saving?
- (4) If each All-Ireland ticket costs €60 and Croke park is filled to it 80,000 capacity, how much money does the G.A.A. make?
- (5) A steward works at an hourly rate of €8.50. If the steward works 7 hours how much pay does he get?
- (6) A referee gets €35 per game. If he receives €315 how many games did he referee?
- (7) In Croke Park one can buy 3 mars bars for €1. At the local shop each mars bar is 65c. How much money does one save buying the three in Croke Park?
- (8) A bottle of 7up is €2 in Croke Park. In the local shop a bottle of 7up is €1.60. If I buy 3 bottles in Croke Park and my friend buys 3 bottles in the local shop, how much does my friend save?
- (9) An All-Ireland ticket costs €60. Calculate the cost of the match tickets for the All- Ireland in the currencies below:

Country	Currency	Euro	Price of ticket
England	Sterling £0.67	€ 1	
U.S.A.	American Dollar \$1.20	€ 1	
Australia	Australian Dollar \$1.25	€ 1	
Cyprus	Cypriot Pound \$1.39	€ 1	





## Worksheet 3H: Data

(i) In your copybook draw a bar chart to illustrate the following players scores:

Mattie Forde	4 points
Jason Sherlock	1 point
Peter Canavan	6 points
Stephen O'Neill	3 points
Ciarán McDonald	4 points
Ross Munnelly	9 points

(ii) In your copybook draw a multiple bar chart to illustrate the following league ladies football results:

County	Wins	Losses	Draws
Cork	3	0	2
Mayo	2	1	2
Meath	4	1	0
Wexford	2	3	0
Waterford	4	0	1

(iii) A trend graph is used to show data, which changes over time.

Using squared paper construct a trend graph to illustrate the match attendances in Semple Stadium

Date	Attendance
17th June	55,000
12th July	47,000
26th July	39,000
3rd August	28,000
8th Sept	46,000

## Worksheet 3I: Chance

(iv) Use a table to record the possible outcomes of the home teams 5 league matches in either wins or losses. How many possible outcomes are there?

Win	Lose
5	0

Tick the most appropriate language for each statement

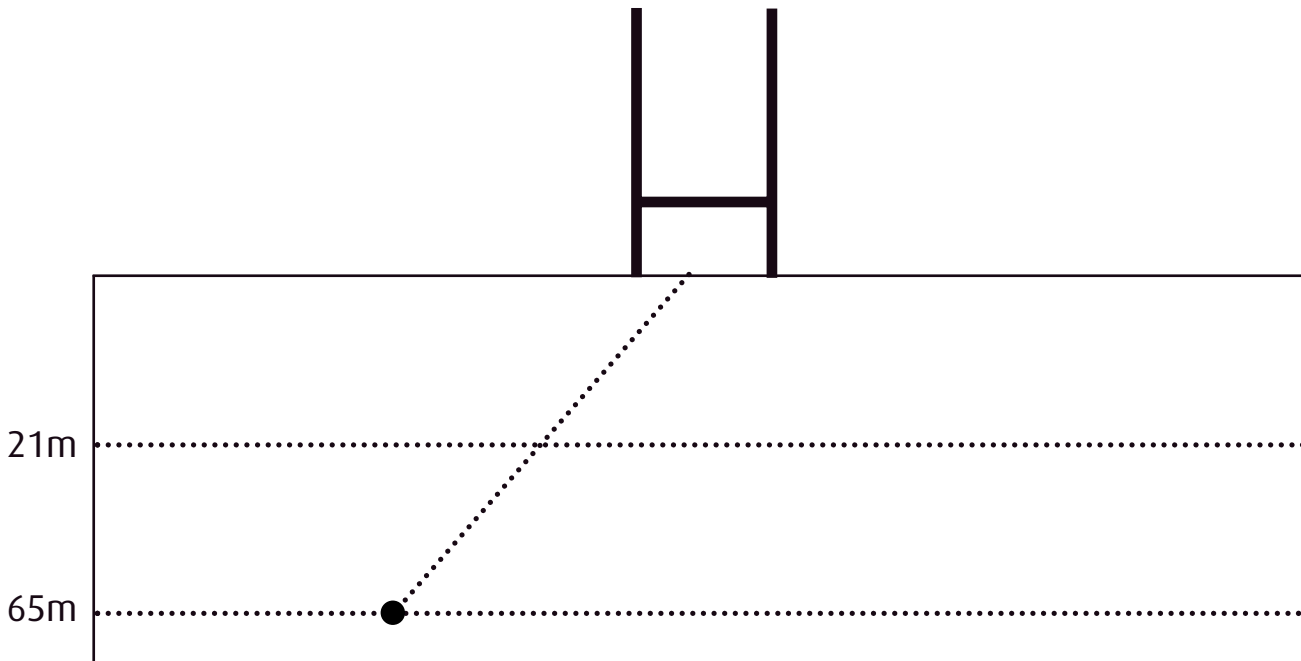
- A: Corks chance of beating Kilkenny  
 B: Waterford having 3 players sent off  
 C: The referee getting injured during the game  
 D: Damien Fitzhenry saving a goal  
 E: The referee not turning up for the All-Ireland camogie final

	Very Likely	Likely	Equally Likely	Unlikely	Very Unlikely
<b>A</b>					
<b>B</b>					
<b>C</b>					
<b>D</b>					
<b>E</b>					



## Worksheet 3J: Shape and Space

- (1) What shape is a gaelic games pitch? \_\_\_\_\_
- (2) What shape is a football in Gaelic football?  
Why is this a suitable shape? Can you suggest a shape that would be unsuitable as a football?
- \_\_\_\_\_



- (3) What word describes the line that is formed by the crossbar? \_\_\_\_\_  
What word describes the line that is formed by one goalpost? \_\_\_\_\_
- (4) How would you describe the relationship between the two goal posts? \_\_\_\_\_
- (5) How would you describe the relationship between the goal posts and the crossbar? \_\_\_\_\_
- (6) What angles can you recognize in the goal posts? \_\_\_\_\_
- (7) The player at the black dot is going to take a 65m puck. \_\_\_\_\_  
What kind of an angle will the line of the ball make with the goal? \_\_\_\_\_
- (8) Do the goal posts have line symmetry? \_\_\_\_\_
- (9) Name one other shape at a sports stadium \_\_\_\_\_

## Worksheet 3k: Length/Area

- (1) If the dimensions of a Gaelic games pitch are 137 m long and 82 m wide, what is the area of the pitch? What is the perimeter? \_\_\_\_\_
- (2) What are the dimensions of your school pitch?  
Is its area larger or smaller than the pitch described above? \_\_\_\_\_
- (3) Centimetre, metre or kilometer?  
Which unit would you use to measure the following:
- (a) The length of a hurley \_\_\_\_\_
- (b) The height of a goal post \_\_\_\_\_
- (c) The length of a football pitch \_\_\_\_\_
- (d) The distance from Galway to Croke Park \_\_\_\_\_
- (e) The length of a puck-out \_\_\_\_\_
- (4) An Irish Handball court has the following dimensions: 60m x 30m
- (a) Calculate the area of the handball court \_\_\_\_\_
- (b) Calculate the perimeter of the handball court \_\_\_\_\_
- (5) An international handball court has the following dimensions: 40m x 20m
- (a) Calculate the area of the international handball court \_\_\_\_\_
- (b) Calculate the perimeter of the international handball court \_\_\_\_\_

## Weight

- (1) Hold a sliotar.
- (a) Estimate what it weighs in grams. Check your estimate. \_\_\_\_\_
- (b) The rules specify that for a senior hurling game it should weigh between 100g and 130g. Does this sliotar meet the requirements of the rules? \_\_\_\_\_
- (c) The rules specify for camogie that sliotar should weigh between 90g and 110g. Does this sliotar meet the requirements for the rules of camogie? \_\_\_\_\_
- (d) Name a sports ball that is heavier than/lighter than this. \_\_\_\_\_

