TEACHER NOTES
MATHS

1 + 1 = 2

MODULE 3

TO BE USED IN CONJUNCTION WITH **WORKSHEETS 3A TO 3H**

Lesson 1

Strand: Data. **Resources:** **Worksheet 3A.**

Aims: The child should be enabled to:

1. Collect, organise and represent data using pictograms, block graphs, bar-charts and bar-line graphs.
2. Read and interpret data presented in chart form.

Suggested Activities:

1. Discuss all aspects of the graph provided. Examine the numbers on the vertical line and discuss if these numbers would be appropriate if the graph represented stadium capacity. Examine the changes that would have to be made in order to effectively illustrate this.
2. The children could be asked to represent the same data in many different forms; illustrating the inherent connection between that which is being represented, albeit in different forms.
3. The children could conduct class surveys based on relevant data. The topics could include favourite players, favourite inter-county jerseys etc.

Answers To Worksheet 3A: A. Colm Cooper B. 102 C. Ross Munnelly D. 10 E. Subjective question but Colm Cooper based on the data provided. F. Alan Brogan and Matty Forde.

Lesson 2

Strand: Number. **Resources:** **Worksheet 3B.**

Aims: The child should be enabled to:

1. Explore, recognise and record patterns in numbers from 0 to 9999.
2. Read, write and order four-digit numbers and solve simple problems.

Suggested Activities:

1. The children could be asked to estimate the imagined capacity of two stadiums if taken together. Likewise they could be asked to estimate the capacity of the stadium if half of it was closed for a game.
2. The children could link this to **Worksheet 3A** by rounding the votes received by the players to the nearest thousand and presenting them in graph form.

Answers To Worksheet 3B: 1 (b) 1,239, 3,415, 5,401, 7,854, 9,107; 2 (a) 4,754; 2(b) 1,801; 2 (c) 7, 273; 2 (d) 6,005. 2 (e) 4,341. 3 (b) Kieran Donaghy, Jason Sherlock, Owen Mulligan, Ciaran MacDonald; 3.(c) Any number between 6,297 and 7,541; 3 (d) 8,604.

Lesson 3

Strand: Data. **Resources:** **Worksheet 3C.**

Aims: The child should be enabled to read and interpret simple pie-charts, involving the use of the fractions 1/2, 1/4 and 1/3.

Suggested Activities:

1. This worksheet will allow the pupils to demonstrate their ability to interpret simple pie-charts and represent data in the form of pie-charts.
2. The children should discuss how, when and why it would be appropriate to represent data in pie-chart form as opposed to other forms of graphs.
3. The children could conduct class surveys and attempt to represent them in pie-chart form, thus allowing them to assess the appropriateness of the pie-chart to represent such information.

Answers To Worksheet 3C: 1 (a) 500; 1 (b) 250; 1 (c) 250; 3 (a) Yes; 3 (b) 1/3; 3 (c) 2,000.

Lesson 4

Strand: Number. **Resources:** **Worksheet 3D.**

Aims: The child should be enabled to:

1. Identify fractions and equivalent forms of fractions with denominators 2, 3, 4, 5, 6, 8, 9, 10 and 12.
2. Solve and complete practical tasks and problems involving fractions.

Suggested Activities:

1. This worksheet should allow the children to demonstrate a developing understanding of fractions.
2. The children could further compound their understanding of fractions by listing the data in both ascending and descending order.

3. The children could examine more complex fractions by conducting surveys on a range of opinions in the class and presenting the information as fractions that may or may not be simplified throught the use of denominators.

Answers To Worksheet 3D: 2. (a) He scored less than half; 2. (b) They received more than half of the yellow cards; 2. (c) John Mullane scored the greater fraction of points. 3. (a) 6/15; 3 (b) 3/15; 3. (c) 1/15; 3. (d) 1/15; 3. (e) 4/15. 4. (a) 5/15; 4 (b) 3/15; 4. (c) 2/15; 4. (d) 2/15; 4. (e) 1/15; 4. (f) 2/15.

Lesson 5

Strand: Number. **Resources:** **Worksheet 3E.**

Aim: The child should be enabled to make informal deductions based on their skills of estimation.

Suggested Activities:

1. This worksheet should allow the children to demonstrate their ability to differentiate between certainties, estimation and wild guesses.
2. The children themselves should be asked to make statements and present scenarios and outline the rationale that governs their estimations.
3. Each child could give an example of both wild guesses and estimations for the upcoming league campaign and championship.
4. Discuss the role of information in the process of making a reasonable estimation and discuss how the children could improve their skills of estimation.

Answers To Worksheet 3E: 1. There are 17 symbols in the box. 2. (a) An estimate; 2. (b) A guess; 2. (c) A guess; 2. (d) An estimate. 3. (a) 114; 3. (b) It was the weekend.

Lesson 6

Strand: Number. **Resources:** **Worksheet 3F.**

Aims: The child should be enabled to develop an understanding of multiplication as repeated addition and vice versa.

Suggested Activities:

1. This worksheet should consolidate a basic understanding of multiplication.
2. The children could examine the relationship between the goals and points system of scoring and the three times tables.
3. The children could be asked to create their own simple puzzles based on the puzzles provided by linking multiplication equations they create themselves to letters that comprise sentences.

Lesson 7

Strand: Measures. **Resources:** **Worksheet 3G.**

Aim: The child should be enabled to consolidate and develop further a sense of time passing.

Suggested Activities:

1. This worksheet should enable the pupil to demonstrate their ability to read and interpret simple timetables. It should also enable them to illustrate that they can add and subtract hours and minutes. Finally it should enable them to illustrate a basic understanding of the calendar.
2. The children could show their understanding of time and the clock by producing their own timetables.
3. The children could examine television schedules and count the hours in the schedule dedicated to GAA programmes.
4. Their understanding of the calender could be further developed over a period by referring to a calender in the class, marking important championship games and counting the days, weeks and months between each fixture.

Answers To Worksheet 3G: 1.(a) 7 minutes; 1.(b) 35 minutes; 1.(c) Shorter (20 minutes less); 1.(d) 2 minutes; 1.(e) 3 hours and 25 minutes; 1.(f) 1 hour and 35 minutes; 1.(g) 19 minutes. 2. 2:50 (the referee is 10 minutes early). 3. 40 minutes. Puzzle time: 3: 20; 5 hours. Calendar: (a) Tuesday; (b) Thursday; (c) Monday; (d) Thursday; (e) Tuesday; (f) Wednesday; (g) Thursday.

Lesson 8

Strand: Measures. **Resources:** **Worksheet 3H.**

Aims: The child should be enabled to estimate, compare, measure and record lengths of a wide variety of objects using appropriate metric units.

Suggested Activities:

1. Discuss the various units of measurements and why different units of measurement are required.
2. Discuss different movements in Gaelic football and hurling such as the hand-pass and puck out and select the most appropriate unit of measurement in each case.
3. Discuss the different things required in order to compete in Gaelic Games and the length of each of them.
4. The children could also use the diagram of the pitch in order to illustrate an understanding of right angles.

Answers To 3H: 1. A rectangle; 2. 280m; 3. Estimation; 4. 5cm; 5. (a) Metres; 5 (b) Centimetres; 6. (a) 5cm; 6. (b) 7.5cm; 6 .(c) 4.5cm.