Game 3M3: Weight

Strand: Measures **Strand Unit:** Weight

Curriculum Objectives Covered:

- Estimate, compare, measure and record the weight of a wide variety of objects using appropriate metric units (kg, g).
- Solve and complete practical tasks and problems involving the addition and subtraction of units of weight (kg and g).

Name: "Guesstimation"

<u>Aim:</u> To estimate the weights of various classroom objects and then measure the actual weights. Guess as close as possible to win.

Activity Area: Classroom Duration: 30 minutes

Resources:

- Whiteboard.
- A selection of everyday objects (one for each child in the class see grid).
- Paper and pencils for teams to work out answers.
- Weighing scales for each team.

Set Up:

- 1. Before the game, the children should be reminded of the weights of a kilogram and a gram. They should be given, for example, a bag of sugar to hold, to feel the weight of 1kg, and a thumb tack to feel the weight of 1g.
- 2. The class should be split into equal sized teams of approximately 5 children per team.
- 3. The teacher projects/draws up the following type of grid onto the whiteboard. The list of objects should be relevant to the classroom environment.

Objects	Estimate	Actual weight	Difference
Example: Weight of a pencil case	150g	225g	75g
Weight of a school bag			
Weight of an atlas			
Weight of 10 copies			
Weight of one shoe			
Weight of a maths book			
Weight of 10 maths books			
Weight of your lunch			
Weight of a mug			
Weight of a plate			
Weight of a roll of toilet roll			
Weight of a paper weight			
Weight of a CD player			
Weight of 10 potatoes			
Weight of the globe			
Weight of a history book			
Weight of a pair of shoes			
Weight of a milk carton			
Weight of a box of straws			
Weight of a duster			
Weight of a bag of fruit			
Weight of 10 notebooks			
Weight of a CD			
Weight of a marker			
Weight of a mobile phone			

Start Playing:

- 1. Each team is allocated 5 objects from the list (or an amount equal to the number of players in the team).
- 2. Each team must come up with measurement estimates for their 5 objects. Although teams can confer, the players on each team should be responsible for estimating the weight of 1 object each. It should be explained to the children that the winning team will be the team that estimates most accurately.
- 3. When the children are happy with their estimates, they should write them up on the whiteboard in the appropriate space on the grid.
- 4. Only after a team has filled in its estimates on the whiteboard should it collect some weighing scales.
- 5. The teams now use the weighing scales to measure the objects accurately.
- 6. As before, the measurements are then filled in on the grid on the whiteboard, with the teacher checking to make sure the measurement is accurate each time, and working with the children where necessary.
- 7. The children then go back to their teams.
- 8. Using the paper and pencils, each child must work out the difference between the estimate and the actual weight of his/her object, by taking the smaller measurement from the bigger measurement.
- 9. The child then writes up his/her answer into the classroom grid.
- 10. When all of the answers are written up in the 'Difference' column, the teacher goes through the answers on the whiteboard to ensure that they are correct.
- 11. The teacher explains that the smaller the difference, the closer that person was to guessing the actual weight of his/her object.
- 12. Finally, the measurements in the 'Difference' column for the 5 objects of each team are added together.
- 13. The winning team is the team with the smallest answer i.e. the smallest combined difference between the estimates and the measurements of their allocated objects.