# Game 6M3: Weight

Strand: Measures Strand Unit: Weight

#### **Curriculum Objectives Covered:**

- Select and use appropriate instruments of measurement
- Rename measures of weight

Name: "Whose Guess is the Closest?"

<u>Aim</u>: To work in teams to estimate the weights of various objects and then measure the actual weights and rename as fractions and decimals of a kilogram. The teams with the closest estimates win.

Activity Area: Classroom Duration: 40mins

Resources:

- 3 sets of playing cards (photocopiable set of 10 cards attached)
- 6 Weighing Record Cards (photocopiable set of 2 cards attached)
- 3 mugs
- 3 plates
- 3 glasses
- 3 toilet rolls
- 3 pencil cases
- 3 lunchboxes
- 3 sets of 5 maths books
- 3 folders
- 3 school bags
- 3 kitchen scales
- 3 bathroom scales
- 3 spring balances
- 3 balances with weights
- Pencil and paper for all players

#### Set Up:

- 1. Photocopy the set of 10 playing cards (x3) and cut them out, making 3 separate piles of playing cards.
- 2. Photocopy the Weighing Record Cards to make 3 sets of 2 cards and cut them out.
- 3. Divide the class into 3 groups (of even numbers if possible e.g. 8 or 10 children in each group) and send them to different areas of the classroom.
- 4. Give each group 1 set of 10 playing cards, 2 Weighing Record Cards, a mug, a plate, a glass, a toilet roll, a pencil case a glass, a kitchen scales, a bathroom scales, a spring balance, a balance with weights and a

pencils and paper for rough work and calculations.

5. Each group now splits into 2 equal sized teams and places their pile of playing cards faced down between the 2 teams.

### Start Playing:

- 1. One member of the first team in each group turns over the top card from the pile and reads it aloud e.g. *"What weight is the mug?"*
- 2. The team confers and agrees upon an estimate for the weight of the mug and writes this estimate into the appropriate space on their Weighing Record Card.
- 3. They then choose a suitable instrument of measurement for the mug and the player who initially turned over the card weighs the mug.
- 4. When both teams are satisfied with the reading on the scales, the team write the 'Actual weight' into the space on their Weighing Record Card.
- 5. The player who weighed the mug now renames the actual weight of the mug as a fraction of a kg and as a decimal and writes these answers into the appropriate spaces on the Weighing Record Card.
- 6. Both teams' players then (using the 'Estimated' and 'Actual' weights) subtract the lighter weight from the heavier and the difference is written into the appropriate space on the weighing team's Weighing Record Card.
- 7. The first player on the opposing team now turns over the next card on the pile and his/her team goes through the same process of estimating, weighing, renaming etc. and fills in the first row on their own Weighing Record Card.
- 8. The play continues back and forth between both teams until all of the playing cards have been used and each player has had the opportunity to weigh at least one item.
- 9. When all 10 playing cards have been used, each team totals up their 'Difference' column and has their total checked by the opposing team.
- 10. The team, in each group, with the smaller total weight in their 'Difference' column wins.

Playing Cards:

What weight is the mug?	Choose a volunteer from your team to be weighed. Guess his/her weight.		
What weight is the plate?	What weight is the lunch box?		
What weight is the glass?	What weight are the 5 maths books?		
What weight is the toilet roll?	What weight is the folder?		
What weight is the pencil case?	What weight is the school bag?		

Weighing Record Card:

Item	Estimated weight in kg and g	Actual weight	Actual weight in fraction form	Actual weight in decimal form	Difference between estimated and actual weight		
e.g. Apple	0kg 100g	125g	$^{125}/_{1000}$ kg	0.125kg	25g		

Total of differences between estimates and actual weights =

## Weighing Record Card:

Item	Estimated weight in kg and g	Actual weight	Actual weight as a fraction of a kg	Actual weight in decimal form	Difference between estimated and actual weight		
e.g. Apple	0kg 100g	125g	$^{125}/_{1000}$ kg	0.125kg	25g		
Copyright Ann Moran Total of differences between estimates and actual weights =							