



Work Place Instructions 8A Weight Lifting

- 1** At the Weight Lifting event station, Player 1 and Player 2 both plan their weight lifts.
 - Each player gets a copy of the 8A Weight Lifting Record Sheet.
 - Each player chooses an item to weight lift and records the item chosen on the record sheet.
 - Each player estimates the mass of 1 item and records their estimate on the record sheet.
 - Using the pan balance and metric weights, each player measures the mass of 1 item and records it on the record sheet.

If measuring the mass of 1 item is difficult, measure the mass of 10 items and divide to find the mass of 1.
 - Each player estimates how many of this item she can grab in one hand, then estimates the mass of that many of the item and records that estimate on the record sheet.

Jami I think I can grab 30 of these little cubes. Each cube has a mass of 1 gram, so I'm going to put 30 grams.

Rick The dice are bigger than the cubes, but I bet I can grab 30 of them anyway. One of them is about 5 grams, so I'm going to put 150 grams for my estimate.
- 2** Player 1 grabs as many of her chosen item as she can hold in one hand. Then she counts the items, finds their total mass, and records the total mass on the record sheet.
- 3** Player 2 repeats this process with his chosen item.
- 4** Players calculate the difference between their estimates and the actual mass they grabbed and record the differences in the table.
- 5** The winner is the player whose grab came closest to their estimate.
- 6** Players repeat the game, choosing new items to grab.

NAME _____

DATE _____

**8A Weight Lifting Record Sheet**

Game 1	Player 1	Player 2
Item to be lifted		
Estimate the mass of 1 item		
Actual mass of 1 item		
Estimate the mass of your grab (in grams)		
The actual mass		
Difference		

Game 2	Player 1	Player 2
Item to be lifted		
Estimate the mass of 1 item		
Actual mass of 1 item		
Estimate the mass of your grab (in grams)		
The actual mass		
Difference		

Game 3	Player 1	Player 2
Item to be lifted		
Estimate the mass of 1 item		
Actual mass of 1 item		
Estimate the mass of your grab (in grams)		
The actual mass		
Difference		

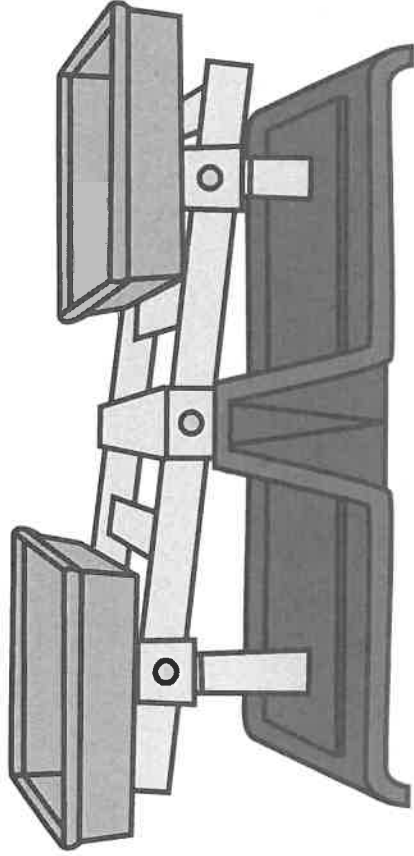
I am going to lift the _____
object

I estimate the mass will be _____ grams.
number

The actual mass is _____ grams.
number

My estimate of the mass is _____ grams.
number

The actual mass is _____ grams.
number

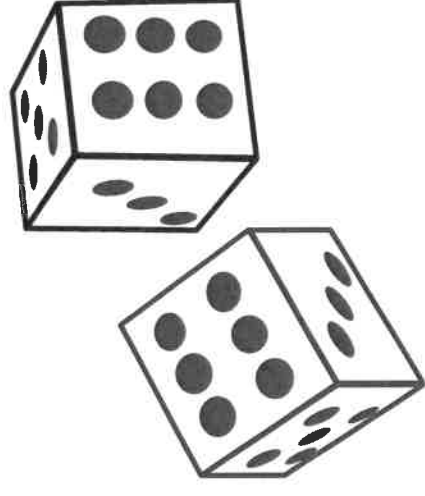


The difference between my estimate and the

actual mass is $\frac{\text{number}}{\text{number}} - \frac{\text{number}}{\text{number}} = \frac{\text{number}}{\text{number}}$.

My difference is $\frac{\text{number}}{\text{number}}$ grams and your

difference is $\frac{\text{number}}{\text{number}}$ grams, so $\frac{\text{you/I}}{\text{you/I}}$ win.



My strategy is _____

