**THE ESTIMATING GAME.**

**Aims/objectives:**

To give students practice in estimating measures.

To raise awareness of a range of units used for measurement.

To allow discussion about estimation to take place.

**Starting point (15 mins):**

Arrange students into teams of 4.

Each team will have to estimate a range of different values in order to score points.

Use the height of the door as an example.

First discuss and decide on appropriate units with the class and provide a suitable ‘yardstick’ to aid the estimation. For more able students the units could be metres but the yardstick could be a one foot ruler to develop knowledge about the relationship between metric and imperial units.

Also discuss the meaning of the headings in the table. The team must then agree on values to enter into their table (allow up to a minute for this).

You will also need to discuss a scoring scheme. A suggestion is 1 point for the closest estimate and 1 point for the team with the smallest range between their lower and upper bounds (as long as the actual answer is between them)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q** | **Measurement** | **Lower bound** | **Estimate** | **Upper bound** |
| **1** | Height of door |  |  |  |
| **2** |  |  |  |  |

**Suggested activities (15 minutes):**

Give students a range of things to estimate and allow them time to enter the values in their table.

e.g. Length of room.

 Area of window.

 Capacity of a jar.

 Volume of a box.

 Area of floor.

For each estimate discuss and decide on appropriate units and provide a ‘yardstick’ before filling in the table.

**Plenary (10 mins):**

The plenary session can be used to mark the students work and check scores.

Review the aims of the lesson.