LAB 20: RADIOACTIVITY

AIM: To determine the half life of a radioactive decay model

APPARATUS & MATERIALS:

137 dice

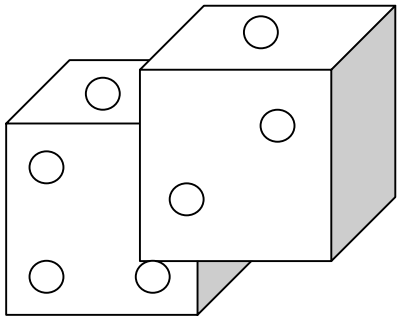

Diagram: Apparatus for identifying the half life of a radioactive decay model

METHOD:

- Shake and throw 137 dice on the table top.
- Remove **ALL** the dice with the six (6) facing upwards and count them. Record this value.
- Collect all the remaining dice. Shake and throw them again, removing all the dice with six (6) facing upwards. Record this value also.
- Repeat this process several times until very few dice are left.

THEORY:

- Define radioactivity and the half life of a radioactive substance.

RESULTS:

- Record the data collected in the table below.

Throw Number	Number of Dice Removed	Number of Dice Left
0	**0**	**137**
1		
2		

- Plot the graph of ***number of dice remaining*** against ***throw number.***

CALCULATION:

- Use this graph to determine the half life of this radioactive decay model. (Show ALL necessary working)

CONCLUSION:

- State the half life of the radioactive decay model