

LEGO radioactive decay and half-life

An activity to model radioactive decay using LEGO bricks.

1. Throw a number of LEGO bricks in a tray and remove all those that land 'studs up' (or 'studs down' or 'sideways').
2. These can be stacked together to show the activity (decays per throw).
3. Throw the remaining bricks and again remove the 'decayed' nuclei and stack these into a second stack.
4. Place this second stack next to the first to build your activity vs. throws bar chart.
5. Use the graph paper grid (attached) if you want a permanent record for students to keep.
6. By changing the conditions for decay, you can get different decay curves.

