Shade in the squares that will be removed in every round. These represent perforations. Leave the squares from the previous round white. Experiment with the playdough model to understand the pattern better.

| ROUND | APPEARANCE AFTER PERFORATION | COUNT - PER FACE |  |  | TOTAL <br> CHANGE <br> Multiply the results of the previous column by the number of faces on the cube (x6). |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | How many squares per face (i.e. surface areas) are about to be removed in this round? | How many new squares per face (that are surface areas) are completely new in this round? | What is the net change of squares per face in this round? (i.e. only new squares) |  |
|  |  | 0 | 0 | 0 | 0 |
| $1^{\text {st }}$ time |  | 1 | 5 | $\begin{aligned} & 4 \\ & (=5-1) \end{aligned}$ | $\begin{aligned} & 24 \\ & (=4 \times 6) \end{aligned}$ |
| $2^{\text {nd }}$ time | $\square$ $\square$ $\square$ $\square$ |  |  |  |  |
| $3^{\text {rd }}$ time |  |  |  |  |  |
| $4^{\text {th }}$ time | Draw how you imagine the result to be. |  |  |  |  |

