## Mobius Strip Worksheet

Name: $\qquad$

| No of twists | Description | No of faces | No of edges |
| :--- | :--- | :--- | :--- |
| 0 |  | 2 | 2 |
| 1 |  | 1 | 1 |
| 2 | gives 1 strip with 2 twists | 2 | 2 |
| 1 with cut at $1 / 2$ | gives 2 linked strips. | 2 | 2 |
| 1 with cut at $1 / 3$ | gives 2 linked strips. | 1 | 1 |
| 1 with cut at $1 / 4$ <br> gives 2 linked strips. | 2 linked strips. Both have 2 twists. | 2 |  |
| 2 twists with cut at <br> $1 / 2$ | 2 linked strips. Both have 2 twists. | 1 |  |
| 2 twists with cut at <br> $1 / 3$ | 2 linked strips. Both have 2 twists. |  | 1 |
| 2 twists with cut at <br> $1 / 4$ |  |  | 2 |

- The width of the linked strips decreases as we cut at $1 / 3,1 / 4,1 / 5$ and so on. We always get 2 strips.
- If we connect two bands with 0 twists (two cylinders) at right angles to each other and cut at $1 / 2$, we get a square.
- If we connect two Mobius bands with 1 twist (the direction of the twist should be opposite for the two bands) at right angles to each other and cut at $1 / 2$, we get 2 interconnected heart shaped strips.

