Name $\qquad$

## Platonic Solids and the Euler Characteristic

Fill out the table below and compute the Euler Characteristic $V-E+F$ for each Platonic Solid

| Platonic Solid | \# of Vertices $V$ | \# of Edges E | \# of Faces $F$ | Euler Characteristic <br> $V-E+F$ |
| :---: | :---: | :---: | :---: | :---: |
| Tetrahedron |  |  |  |  |
| Cube |  |  |  |  |
| Octahedron |  |  |  |  |
| Dodecahedron |  |  |  |  |
| Icosahedron |  |  |  |  |

This result mean that all Platonic Solids are topologically equivalent to $\qquad$

