Let's make a model of the Orion constellation by calculating the diameter of each star and its distance from the sun.

Nature and distance of the stars of the constellation of Orion:

| Stars | Nature | Distance <br> from sun <br> (Light <br> Year) | Length of spike <br> (cm) <br> Scale: <br> $1 \mathrm{~cm}=>75$ Light <br> Year | Corresponding Diameter in cm <br> - Dwarfs: 2 mm <br> - Giant: 1 cm <br> - Supergiants/ Blue-White: 1.5 cm <br> - Supergiant/ Red-Orange $: 3 \mathrm{~cm}$ |
| :--- | :--- | :--- | :--- | :--- |
| Meissa | Giant Blue/white | 1055 |  |  |
| Betelgeuse | Supergiant/ Orange | 420 |  |  |
| Bellatrix | Giant/ Blue-white | 240 |  |  |
| Alnitak | Supergiant/ Blue | 820 |  |  |
| Alnilam | Supergiant/ Blue | 1340 |  |  |
| Mintaka | Giant Blue/White | 910 |  |  |
| Saiph | Supergiant /Blue | 720 |  |  |
| Rigel | Supergiant / Blue | 770 |  |  |
| Aldebaran | Giant/ Orange | 75 |  |  |
| Sun | Yellow Dwarf | 0 |  |  |


| Nebula | Nature | Distance <br> from sun <br> (Light <br> Year) | Length of spike <br> $(\mathrm{cm})$ | Corresponding Diameter |
| :--- | :--- | :--- | :--- | :--- |
| The Orion Nebula | Red Gas <br> and dust <br> Cloud | 1500 Light <br> Years |  | 4 cm in diameter containing 4 <br> young white-blue giants |

Note: It will be necessary to add around 2.5 cm more for each spike corresponding to the depth of the polystyrene plate.

