**How to make an Orion Constellation Model**

We know that light travels 186,000 miles per second. Let’s say that a 1 cm string equals

the distance light travels in one second. If it takes about 8 minutes for light from the

sun to reach us, how long would the string be? (480 cm) The light from the next nearest

star takes 4½ years to reach us. How long would that string be? (141,912,000 cm)

**Materials**

* 9 Beads
* 225 cm of fishing string
* Cardstock
* Ruler
* Scissors
* Pushpin
* Tape

Procedure

1. Get a copy of the Orion constellation.

2. Get your string and beads. Cut 9 pieces of string, each 25 cm in length. Attach a bead to each piece of string by tying it on.

3. Hold the Orion constellation over your black cardstock, using a pushpin, make a hole big enough for the thread at the location of the seven labeled stars.

4. In each hole push the string through until the correct length is measured (see chart below). Tape in place on back of cardstock.

5. Hold the model above your head with the cardstock parallel to the floor and the beads dangling above you. You can now SEE the relative distances from the Earth of each star!

Betelguese (522 Ly) right shoulder string should be 15 cm

Bellatrix (243 Ly) left shoulder string should be 18 cm

Mintaka (916 Ly) northernmost in belt string should be 11 cm

Alnilam (1342 Ly) middle of belt string should be 7 cm

Alnitak (817 Ly) southernmost in belt string should be 12 cm

Saiph (815 Ly) right foot string should be 12 cm

Rigel (773 Ly) left foot string should be 13 cm

Meissa (1000 Ly) Orion’s head string should be 11 ½ cm

Nebula (1344 Ly) below Orion’s belt string should be 7 cm

