

PLANETARY "BRACELET"

CHILDREN WILL CREATE A SCALE MODEL OF A SOLAR SYSTEM IN THE FORM OF A HUGE BRACELET.

MATERIALS:

10 DIFFERENT COLORED BEADS
5 FEET OF STRING
METERSTICK

ACTIVITY:

INFORM THE CHILD THAT YOU WILL BE EXPLORING THE DISTANCES BETWEEN EACH OF THE PLANETS IN OUR SOLAR SYSTEM. THESE DISTANCES WILL BE MEASURED IN ASTRONOMICAL UNITS (AU). ONE AU IS THE DISTANCE BETWEEN THE EARTH AND THE SUN (WHICH IS ABOUT 93,000,000 MILES!!!).

THE FOLLOWING LIST MAY BE HELPFUL:

PLANET NAME	DISTANCE FROM SUN	ASTRONOMICAL UNITS (AU)	LENGTH OF STRING ATTACHED TO EACH BEAD
MERCURY	36,000,000 MILES	0.4	4 CM
VENUS	67,000,000 MILES	0.7	7 CM
EARTH	93,000,000 MILES	1	10 CM
MARS	142,000,000 MILES	1.5	15 CM
JUPITER	484,000,000 MILES	5	50 CM
SATURN	887,000,000 MILES	9.5	95 CM
URANUS	1,784,000,000 MILES	19	190 CM
NEPTUNE	2,796,000,000 MILES	30	300 CM

FOR YOUNGER CHILDREN:

PRE-CUT THE LENGTHS OF STRING FOUND ON THE LAST COLUMN OF THE CHART.

FOR OLDER CHILDREN:

HAVE THE CHILD COMPLETE THE CHART BY MULTIPLYING EACH AU DISTANCE BY THE SCALE FACTOR OF 10 CM PER ASTRONOMICAL UNIT. (10 CM REPRESENTS 1 AU)

ONCE YOU HAVE COMPLETED YOUR "BRACELET", REMIND THE CHILD THAT OUR SOLAR SYSTEM IS HUGE IN SIZE BY NORMAL STANDARDS. YOU MAY ALSO WANT TO DISCUSS HOW PLANETS FARTHER AWAY FROM THE SUN ARE COLDER, AND PLANETS CLOSEST TO THE SUN ARE WARMER.