

How big is the Sun?

Is it bigger or smaller than the Earth?

It looks small because it is very far away. But it is much, much bigger.



Materials:

- 60 inches of string
- Chalk
- 120 pennies

What to do:

- Cut a string about 60 inches long and tie a piece of chalk to one end.
- Measure 41 inches from the chalk and make a mark on the string.
- In a large open area have a child hold the marked point on the ground and have another child walk around the first child drawing a circle. (The children have become a life size compass.)
- Have them mark the middle and draw a chalk line the length of the radius.

Explain that if the Earth were the size of a penny then the Sun would be the size of the circle they just drew.

Have each child hold a penny in their hand and place it next to the big circle to get the idea of the ratio.

Ask the children to guess how many pennies it would take to go across the middle of the chalk Sun.

Write their predictions down on a chart.

Have the children make a line of pennies across the middle of the circle using the radius line to help them keep in the diameter and not "wander" off.

Have the children count the pennies and record the number on the chart, comparing it to their predictions.

It should be about 109 pennies.

Explain that the **one penny equals one Earth on this scale model.**

It will take 109 Earths to span the diameter of the Sun.

You may need to review some math if the children are fuzzy about the difference between diameter and radius.



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