

Sizing up the Universe

<http://learning.si.edu/idealabs/sizinguptheuniverse/#intro/>

Use the link above complete the activity below

1. What did you choose to represent Earth? _____
2. What represents the Moon?
3. What is the Diameter of the Earth? _____?
4. What is the diameter of the Moon? _____?
5. What is the distance between the Earth and the Moon? _____?
6. Describe the orbit of the moon around your house.

7. How much larger is the Earth than the Moon?
8. How big is the Sun? The Size of _____?
9. The Sun's Diameter is about _____ times greater than Earth.
10. What is the diameter of the Sun? _____ And of Earth? _____
11. Describe the orbit of Earth around your house.

12. How far is Earth from the sun?
13. How long does it take light to reach the Earth?
14. What is Diameter of Pluto? _____
15. How does Pluto compare to Earth?
16. Describe Pluto's orbit around your house.

17. How does it compare to Earth's orbit?
18. How many Earth years does it take Pluto to circle around the sun?

A Star among Stars

19. What is the distance across the solar system?
20. What is the distance across the Milky Way?
21. How many galaxies are in the universe?

22. What is the next nearest galaxy?
23. Can Galaxies collide?
24. How many stars are in a galaxy?
25. How far away are stars from each other?
26. If galaxies collided what would happen to the stars?
27. Generally galaxies are not colliding but moving away what does that tell us?
28. How many stars are in our galaxy the milky way?
29. What is the name of our nearest star?
30. Describe the orbit or distance of Proxima Centuri from your house.
31. What is the distance in miles to Proxima Centuri? _____
32. What is an Au?