Name _____

Pulsars

Student Datasheet ...

- Scientists discovered blinking lights in outer space.
  What did they turn out to be?

- The star is crushed by gravity until nothing is left but a "giant atom."
  If Mt. Everest was crushed the same way, do you remember how big it would be?

Something else to think about…

You can think of atoms like soap bubbles. They stick to each other to make things, like stars and people. But if you squeeze all the empty space out of them, or "pop" them, only a tiny bit remains, called the "nucleus." In pulsars (or neutron stars), all the atoms are "popped." Then all the nuclei are scrunched together, making one giant atomic nucleus. That's how neutron stars can become a "single atom" that's 10 miles across. (Or Mt. Everest…a golf ball!)

(NOTE: "Popping the bubble" of atoms is not easy. Nothing on earth is strong enough to crush Mt. Everest into a golf ball. Only the enormous gravity of a collapsing star is powerful enough to do it. So, you would have to put Mount Everest on the surface of a neutron star to see its atoms "pop," shrinking it to golf ball size..!)