My Solar System - PhET sim EXIT Slip

* Required

1. In general, as the MASS of a STAR INCREASES by doubling in size and the planet mass remains constant, what happens to the planet's orbit? *

   Mark only one oval.

   - Gets smaller, shorter orbit, shorter time
   - Gets larger, longer orbit, longer time
   - Nothing, stays the same

2. In general, as the MASS of a PLANET decreases in half its size and the mass of the star remains constant, what happens to the planet's orbit? *

   Mark only one oval.

   - Gets smaller, shorter orbit, less time
   - Gets larger, longer orbit, longer time
   - Nothing, stays the same
   - Crashes into the star

3. As the DISTANCE of a planet decreases from a x position 122 to 72 and the masses of the objects remains constant, what happens to the planet's orbit? *

   Mark only one oval.

   - Gets smaller, shorter orbit, less time
   - Gets larger, longer orbit, longer time
   - Nothing, stays the same
   - Crashes into the star
4. In general, as the VELOCITY (speed) of a planet increases and the masses of the objects remains constant, what happens to the planet's orbit? *

*Mark only one oval.*

- [ ] Gets smaller, shorter orbit, less time
- [ ] Gets larger, longer orbit, longer time
- [ ] Nothing, stays the same

5. Application: IF the sun decreases in MASS, what would happen to the Earth's orbit? *

*Mark only one oval.*

- [ ] Gets smaller, shorter orbit, less time
- [ ] Gets larger, longer orbit, longer time
- [ ] Nothing, stays the same