



Name: _____

Date: _____

Solar system coloring (pg 15 ESRT)

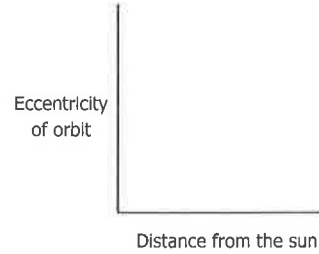
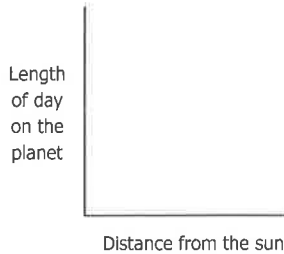
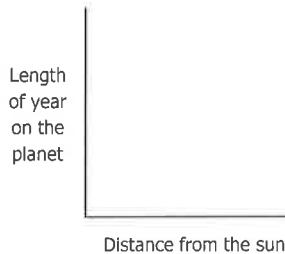
1. Color in the box that contains the number for the planet with the lowest density **gray** (this has been done for you as an example. You're welcome.)
2. Color in the box that contains the number for the planet with the highest density **red**.
3. Color in the box that contains the number for the planet with the most elliptical orbit **blue** (*hint: see below*)

More elliptical →  → less like a circle → eccentricity closer to 1.0

Less elliptical →  → closer to a circle → eccentricity closer to 0.0

Also: the sun is a star (not a planet); Earth's moon is not a planet

4. Color in the box that contains the number for the planet with the least elliptical orbit **green**.
5. Color in the box that contains the number for the planet with the longest day **purple** (*hint: it's the one with the longest **period of rotation***)
6. Color in the box that contains the number for the planet with the shortest year **brown**. (*hint: period of revolution*)
7. Color in the box that contains the number for the planet with the *second* most elliptical orbit **orange**.
8. Color in the box that contains the number for the largest planet **yellow**. (*hint: by size → use diameter*)
9. Color in the box that contains the number for the smallest planet **red**. (*hint: by size → use diameter*)
10. Draw the graphs below. If necessary write "no relationship"



11. _____ How many times larger is the sun than earth *by mass*?
12. _____ The earth is about how many times larger (by diameter) than our moon: *1.5 times, 2 times, 4 times, 6 times, 10 times, 20 times, 100 times*

Solar System Data

Celestial Object	Mean Distance from Sun (million km)	Period of Revolution (d=days) (y=years)	Period of Rotation at Equator	Eccentricity of Orbit	Equatorial Diameter (km)	Mass (Earth = 1)	Density (g/cm ³)
SUN	—	—	27 d	—	1,392,000	333,000.00	1.4
MERCURY	57.9	88 d	59 d	0.206	4,879	0.06	5.4
VENUS	108.2	224.7 d	243 d	0.007	12,104	0.82	5.2
EARTH	149.6	365.26 d	23 h 56 min 4 s	0.017	12,756	1.00	5.5
MARS	227.9	687 d	24 h 37 min 23 s	0.093	6,794	0.11	3.9
JUPITER	778.4	11.9 y	9 h 50 min 30 s	0.048	142,984	317.83	1.3
SATURN	1,426.7	29.5 y	10 h 14 min	0.054	120,536	95.16	0.7
URANUS	2,871.0	84.0 y	17 h 14 min	0.047	51,118	14.54	1.3
NEPTUNE	4,498.3	164.8 y	16 h	0.009	49,528	17.15	1.8
EARTH'S MOON	149.6 (0.386 from Earth)	27.3 d	27.3 d	0.055	3,476	0.01	3.3