

Testing the Pseudoscience of Astrology

Astrologers will tell you that the Sun sign (which is the sign of the zodiac the Sun was in when a individual was born) influences the occupation a person chooses and is a strong factor of overall personality.

Since it takes a certain kind of personality to be President (outgoing, well-spoken, ambitious), we are going to test astrology using the 42 presidents. If personality and occupation are strongly affected by Sun sign, we should find that the birthdays of the Presidents are clustered in one (or a few) signs. If Sun signs do not affect personality and occupation, the Presidents' birthdays should be randomly distributed among the zodiac signs.

Use the attached data sheets to help answer the following questions.

1. Which sign do you think will have the greatest number of Presidents? Explain your answer (what sign is associated with the important traits a president should have).

2. How many Presidents' birthdays fall under each of the Zodiac signs?

Aries _____

Libra _____

Taurus _____

Scorpio _____

Gemini _____

Sagittarius _____

Cancer _____

Capricorn _____

Leo _____

Aquarius _____

Virgo _____

Pisces _____

3. Which sign has the largest number of Presidents? How many?

4. Which sign has the smallest number of Presidents? How many?

5. Looking at your results, do you see any pattern?

6. Would you say the birth dates of the Presidents are strongly clustered in one or a few signs?

7. Use your results to make a statement regarding how scientific astrology really is.

Name of Sign	Dates of Sign
<u>Aries</u>	March 21 to April 20
<u>Taurus</u>	April 21 to May 20, 21
<u>Gemini</u>	May 21, 22 to June 21
<u>Cancer</u>	June 22 to July 22
<u>Leo</u>	July 23 to August 22, 23
<u>Virgo</u>	August 23, 24 to September 22, 23
<u>Libra</u>	September 23, 24 to October 22, 23
<u>Scorpio</u>	October 23, 24 to November 22
<u>Sagittarius</u>	November 23 to December 21, 23
<u>Capricorn</u>	December 22, 24 to January 20
<u>Aquarius</u>	January 21 to February 19
<u>Pisces</u>	February 20 to March 20

Aries...the impulse to be...the will to survive. It is the Spring Equinox...the Season of lengthening light. Seeds that have been slumbering below the ground since harvestime of the previous Autumn push upward, eager to be born. The sprout bursts forth into a new world, which is cold and often unpredictable. The innocent possess the courage to take on life and the fortitude to survive the winds of March.

Taurus...the desire to be...the appreciation of earthly sensation. Spring seeks and finds fullness. The air is rife with the melodies of life...in the rushing of the stream and the harmonious trill of the bird. The Earth is lush and green...an inviting place. The community tends to crops and hands are dug deep into the soil. Domesticated animals breed. May Day is an abandoned celebration of sensuality and delight in all that the Earth has to offer.

Gemini...the impulse to bloom and pollinate...buzz and share. The Season of Spring enters its final phase and the sprout of the Equinox is now in full bloom. Bees buzz busily from blossom to blossom and bright breezes carry the pollen. Everything seeks to know the other and life is effervescent in its enthusiasm. With the work of Spring completed, it is time to visit neighboring hamlets and share in the stories of Winter.

Cancer...the impulse to protect and nest. The Summer Solstice makes its entrance. Cancer begins with the longest day of the year. Full bloom gives way to the freshly-formed fruit and long, warm days summon forth new creatures into the world. The Earth is protective of her young and, in private reverie, reflects on the chain of life.

Leo...the urge to shine...the desire to be. Summer reaches fullness and the days are hot. With growing done, only ripening remains to be completed. Wheat dons its golden husks and the cheeks of crisp apples adopt a radiant blush. The early harvest fruits are the most succulent in this, the Season of Plenty. The world is now a stage and each individual wants to shine like a star upon its burnished boards.

Virgo...the need to organize and analyze...to prepare for the harvest. Summer comes to its inevitable end as life adds a final touch to perfect the harvest. It is now time to store the bounty of the Earth. Life analyses this bounty, the needs of the community and plans the crop for the year which will follow. A detailed and organized determination is made. Some grain will serve as feed...some as future seed.

Libra...the need to partner...the urge to bring together. It is the dawn of the Fall Equinox. Day and night pause at a point of equality. Light dwindles as nights grow long. An awareness of chilly evenings soon to come creates the desire to share a nest. The crisp air of the day is a canvas of leaf paintings and the delicate filigree of early frost. With preparation and organization completed, the community gathers for the harvest of fruit and grains. Time in the sun has come to an end.

Scorpio...the desire to go beneath the surface...to merge. Life upon Earth's exterior mantle dies. The strength of the plant returns to the root, the potential of the flower secreted in the seed. Below the surface, life burns...waiting to erupt. The visible world has vanished, but mystery remains and individuals learn to see with more than merely the eye. With patience, the hidden life force will wait...and plot its return.

Sagittarius...the desire to contemplate, to understand and to philosophize. The work of the Season is done. The harvest is stored and hopefully in sufficient abundance to serve the community until Spring. Fires burn brightly in hearths, illuminating the darkness of night and casting pictures upon the wall. Within imagination, visits are made to faraway places. The mind ponders on life's greater purpose...the meaning of existence and its purpose on Earth.

Capricorn...the need to conserve...the survival of the clan. Born on the longest night of the year, Capricorn enters on the heels of the Winter Solstice. The world is cold with limited resources and the harvest must be made to last until Spring. Light and heat are precious commodities, but the silence of a clear winter night is often likened to that of a lullaby. There is a struggle for space within the hierarchy of the community. Darkness is a dominating factor, but each new day carries a little longer than the one before, demonstrating a slow but steady climb toward warmer times. Eventually, the Year will begin again.

Aquarius...the urge to individuate. Confined within the shelter but awakened by the lengthening light, the social animal demands freedom. The spark of such desire becomes apparent in all life...the bear in the cave and the sprout within the seed. Those imprisoned by the cold of Winter are summoned by the increasing day. Individuals observe those around them, fascinated by human nature. Together, each individual squirrel recalls the timetable followed by all squirrels and a great choir sings, "I want to be me!"

Pisces...the need to dissolve, to shape-shift and become one with a larger truth. Spring is not far away. Winter wants to dissolve into a new cycle of growth. The ice desires to melt and return once more to the oceans and seas. It seeps into the ground, becoming one with the soil, and rises into the air to encircle the Earth and return as rain. The seed gives up the shell that makes it a seed, in order that it might now become a sprout...birth requires sacrifice. The old must perish for the new to discover itself. This is the Season which knows what others might question...the great mystical oneness that transcends all physical form, time and space

Birthdates of U.S. Presidents

1. George Washington: Feb 22, 1732
2. John Adams: Oct 30, 1735
3. Thomas Jefferson: Apr 13, 1743
4. James Madison: Mar 16, 1751
5. James Monroe: Apr 28, 1758
6. John Q. Adams: Jul 11, 1767
7. Andrew Jackson: Mar 15, 1767
8. Martin Van Buren: Dec 5, 1782
9. William Harrison: Feb 9, 1773
10. John Tyler: Mar 29, 1790
11. James Polk: Nov 2, 1795
12. Zachary Taylor: Nov 24, 1784
13. Millard Fillmore: Jan 7, 1800
14. Franklin Pierce: Nov 23, 1804
15. James Buchanan: Apr 23, 1791
16. Abraham Lincoln: Feb 12, 1809
17. Andrew Johnson: Dec 29, 1808
18. Ulysses Grant: Apr 27, 1822
19. Rutherford Hayes: Oct 4, 1822
20. James Garfield: Nov 19, 1831
21. Chester Arthur: Oct 5, 1830
22. Grover Cleveland: Mar 18, 1837
23. Benjamin Harrison: Aug 20, 1833
24. William McKinley: Jan 29, 1843
25. Teddy Roosevelt: Oct 27, 1858
26. William Taft: Sep 15, 1857
27. Woodrow Wilson: Dec 28, 1856
28. Warren Harding: Nov 2, 1865
29. Calvin Coolidge: Jul 4, 1872
30. Herbert Hoover: Aug 10, 1874
31. Franklin Roosevelt: Jan 30, 1882
32. Harry Truman: May 8, 1884
33. Dwight Eisenhower: Oct 14, 1890
34. John Kennedy: May 29, 1917
35. Lyndon Johnson: Aug 27, 1908
36. Richard Nixon: Jan 9, 1913
37. Gerald Ford: Jul 14, 1913
38. Jimmy Carter: Oct 1, 1924
39. Ronald Reagan: Feb 6, 1911
40. George Bush: Jun 12, 1924
41. William Clinton: Aug 19, 1946
42. George Bush: July 6, 1946
43. Barack Obama: August 4, 1961