



Constellations

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Astrology Paving the Way by The Guardian

A CONSTELLATION is a group of STARS that form different shapes and patterns located in OUTER SPACE that have been given a name. Constellations are named after animals, objects and people in history. Various cultures around the world have different NAMES and numbers for constellations, depending completely on what the person INTERPRETS the constellation to be. The constellations you see depend on your location on Earth and time of year. According to NASA which stands for National AERONAUTICS and Space Administration there are officially 88 RECOGNIZED constellations.

Spell: CONSTELLATION INTERPRETS VARIOUS

What does NASA stand for? NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

A constellation is a group of what? STARS

A constellation is a group of stars in outer space that has been given a what? NAME

The constellations you see depend on your location on what planet? EARTH

Constellations are located where? OUTER SPACE

Question Type Key

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Constellations form different _____ and _____ in the sky?

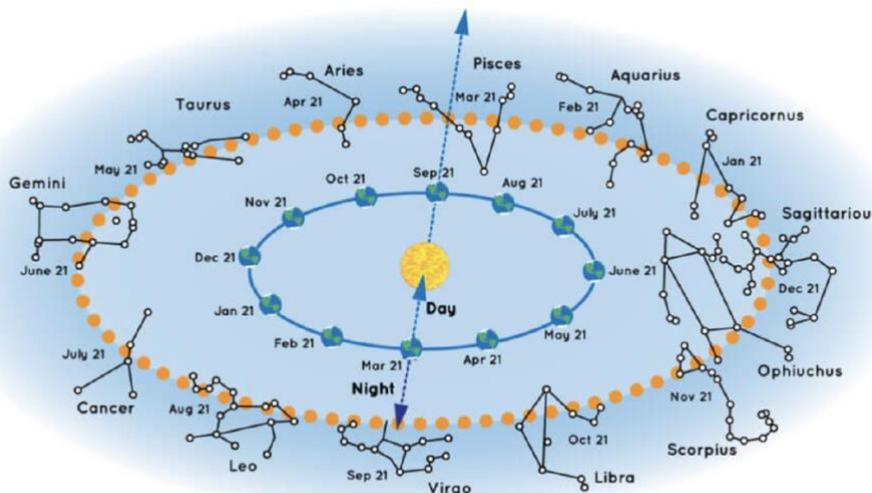
SHAPES AND PATTERNS

Constellations are typically named after what? ANIMALS, OBJECTS AND PEOPLE IN HISTORY

How many officially recognized constellations are there? 88

Based on the image of the constellation above, what do you interpret this to be?

Of the 88 recognized constellations, there are some that are very WELL-KNOWN around the world. ORION is one of the easiest constellations to spot in the sky because it is the BRIGHTEST constellation. Begin by looking for the THREE bright stars that form the straight line of the Orion’s belt constellation. Once Orion is located, it is possible to IDENTIFY other constellations. Additional constellations that can be found after identifying Orion are TAURUS and GEMINI constellations.



A chart showing some of the constellations that are visible from the Northern Hemisphere in different times of year. Credit: NASA/JPL-Caltech

Spell: BRIGHT RECOGNIZED IDENTIFY

What is the name of the brightest constellation? ORION

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How many stars are in Orion's belt? 3

After locating Orion, what other constellations can you find? TAURUS AND GEMINI

Do you know your zodiac sign?

Point to the Pisces constellation

ASTRONOMY is the SCIENTIFIC study of everything in outer space. ASTRONOMERS and other scientists study stars and galaxies that are many LIGHT-YEARS away from earth. Light-years are used to describe the distance between space objects. One light-year is about 6 trillion miles. Stars and constellations stay APPROXIMATELY in the same spot for many years. Because these constellations are in FIXED locations, they are often used as LANDMARKS in the sky. Using fixed constellations to determine one's location in space is called celestial NAVIGATION.

Spell: DISTANCE FIXED LANDMARKS

What is the scientific study of everything in outer space called?

ASTRONOMY

What kind of years away are stars and galaxies? LIGHT

Astronomers study stars and what? GALAXIES

Constellations are fixed in what? LOCATIONS

Using constellations to determine one's location in space is called what?

NAVIGATION

Using fixed constellations to determine one's location in space is called what? CELESTIAL NAVIGATION

Who studies stars and galaxies that are many light-years away from Earth?

ASTRONOMERS AND OTHER SCIENTISTS

What else do astronomers study?

How many miles is a light-year? 6 TRILLION

Write out 6 trillion in numerical form

One's LOCATION on Earth also determines what stars and constellations they can see. The NORTHERN HEMISPHERE is always pointing in a different direction than the SOUTHERN HEMISPHERE. This means that STARGAZERS in AUSTRALIA, for example, get a slightly different view of the

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sky and can view different constellations than those in the UNITED STATES. A stargazer in the United States may be able to see the PISCES constellation in the FALL, but an Australian stargazer would not be able to see the same constellation because it is on the other side of the sun.

Spell: EARTH DIRECTION SKY

What constellation can a stargazer in the United States see in the Fall?

PISCES

What country, other than the USA, did I mention in this lesson? AUSTRALIA

If I can see the Pisces constellation in the Fall, but Australia can not, it is because I am on the other side of what? THE SUN

Why is someone in the Fall living in Australia unable to see the Pisces constellation? LOCATION, OTHER SIDE OF THE SUN

What hemispheres are mentioned in this paragraph? NORTHERN AND SOUTHERN

Which hemisphere are we located in right now?

If you could pick any place in the world to stargaze, where would you choose?



“Big Three Stars Orion’s Belt”

Many other INDIVIDUALS UTILIZED constellations in HISTORY. Some of the

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earliest uses of constellations stemmed from AGRICULTURE. Prior to calendars, it was challenging for farmers to recognize when to sow and harvest their crops. Farmers would search for constellation ORION, which indicated WINTER was coming soon. SAILORS also used constellations to pin-point their location at sea. Modern day constellations still serve a relevant purpose for astronomers and ROBOTIC spacecrafts.

Spell: HISTORY MODERN HISTORY

Where did some of the earliest use of constellations stem from?

AGRICULTURE

Orion indicates the coming of what season for ancient farmers? WINTER

Who uses constellations? FARMERS, SAILORS, ROBOTICS

Do you think advancements in technology will lead to discovery of more constellations?

Constellations also play a large part in many CULTURES. In GREEK MYTHOLOGY, constellations were mostly god-favored HEROES and BEASTS that received a PERMANENT place amongst the stars to be commemorated. In ancient CHINA, it was believed that constellations in the sky directly correlated to life EVENTS on Earth. According to the ancient INCAN empire, every ANIMAL had a corresponding constellation that would look after and protect the living CREATURE.

Spell: MYTHOLOGY EVENTS COMMEMORATED

Which ancient empire believed every animal had a corresponding constellation?

INCAN

Which ancient country believed constellations in the sky directly correlated to life events on Earth? CHINA

Constellations play a large part in many? CULTURES

According to the Incan empire, every animal has a corresponding living what? CREATURE

According to Greek Mythology, constellations were mostly named after god favored _____ and _____? HEROES AND BEASTS

Does your culture have any beliefs about constellations?

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Creative Writing:

If you could create a new recognized constellation, what would be its name and what would it look like?



Gabriella is currently a PIT located in Staten Island, New York. When she isn't spelling, you can find her eating out at her favorite restaurants, hanging out with her parakeet and going on new adventures! It seems like her fate to become a PIT was written in the stars!

Resources:

<https://spaceplace.nasa.gov/constellations/en/>

<http://curious.astro.cornell.edu/>

<https://www.eurekacamping.com>

<https://prezi.com>

<https://www.thoughtco.com/>

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