

The great conjunction

December 21, 2020



Summary

This year, we have a great opportunity to watch Jupiter-Saturn conjunction. They will be visible every night, near each other, and every day Jupiter will be moving towards Saturn. On 21 december, Jupiter will be in front of (will eclipse Saturn) Saturn, and the two planets might appear as a single star.

Tip: To look at the stars, remember to turn off the lights.

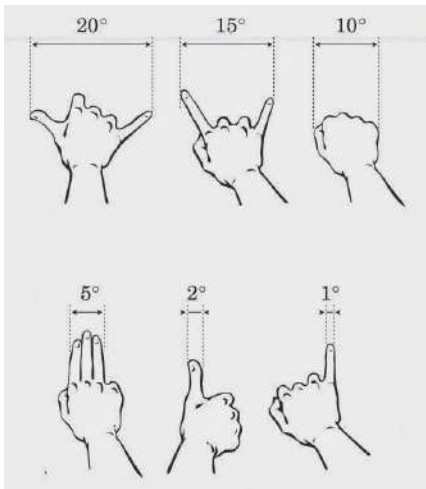
Tiempo asignado: Hasta 21 Diciembre 2020.

FINAL PRODUCT.

Every day you will have to take pictures of the two planets, and then at the end, make a gif. You will also have to investigate and write an article about this event.

ACTIVITY 1: Observation

You will have to take pictures from now until december 21, 2020, with your phone. Both planets will be easily visible, in the south after sunset. Remember that the planets move fast in the sky, so you have to look after sunset. You can use an App to look for the planets in the sky.



Measure the distance between the two planets, every day, and fill in the table.

We will use a “handy” way to measure distances. Hold your hand at arm's length and close one eye. Make a fist, with the back of your hand facing you. The width of your fist will approximately be 10 degrees.

DATE	PICTURE	DISTANCE BETWEEN JUPITER AND SATURN

ACTIVITY 2: INVESTIGATE.

Over the years planetary conjunctions has been considered as signals , you are going to investigate how planets move in the sky, and what people think about it. Search for two historical records in which conjunctions of planets are referred and how they were interpreted..

1. Look for news about december 21 planetary conjunction, try to find those “news” that talk about “special consequences “
2. Surf the web, and find scientific and nonscientific forums for a talking about this conjunction. Take two screenshots showing scientific news, and another two for non scientific news.

ACTIVITY 3: COMMENT..

Ask in your social media what people think about this great conjunction, in your profile try to post the news about the conjunction and then make a little opinion poll.

ACTIVIDAD 4: Analice.

It's time to learn something about these two solar system planets. Find information about Jupiter and Saturn and make a sheet for each planet Remember not to paste and copy, you will have to find the information. In every planet sheet, you will have to talk about:

- The planet's distance to the sun and to the earth, don't forget to talk about the measure unity that you have used.
- Planet's mass, ratio, satellite's numbers, temperature,pressure, year's time, day's time in each planet.
- Chemistry composition of the atmosphere of each planet, don't forget to talk about these chemical compounds with their chemistry nomenclature, and explain what kind of bound make the atoms of the different molecules that we can find in the atmosphere.
- Atmosphere colour, and the relationship with the chemical compounds that we can find in the atmosphere.



Resources:

- [NAUKAS: La gran conjunción del 21 de Diciembre de 2020](#)
- [Desde el tercer planeta: Una conjunción histórica: La previa.](#)
- [Stellarium web](#)

FINAL PRODUCT: Conjunction's gif and an article.

In your comment article:

- One sheet with Arial 12
- Título de la noticia.
- Introduction.
- Body paragraph. Describe the great event, the planetary conjunction. This is the place for your gif. Description of the phenomenon and the two planets. Here is where you must place the gif.
- Historic discussion about the planetary conjunctions, and what we think nowadays..
- Conclusion: Personal opinion about the conjunction.

