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BELONGS TO





Astronomy

SCIENCE SOLS

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4.5b 4.5c 5.1

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Astronomy: A Glimpse of the Planets and Our Sun-Star





CENTER IN THE SQUARE

Matthew C. Fleenor, Ph.D

and

Welcome to Astronomy!

"Twinkle, twinkle little...luminous spheriod of plasma..." Perhaps that's not quite how we sing it, what is another word for, "luminous spheroid of plasma?"

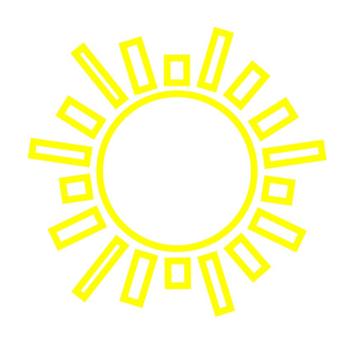
What is the name of your Astronomy Tour Guide?

What is the name of earth's closest star?

We can only see other stars at night, or during a...

which is when what happens? Draw the missing feature in the picture below!





On the roof of Center in the Square we see objects that collect energy from the sun. They are called,

Draw a picture below

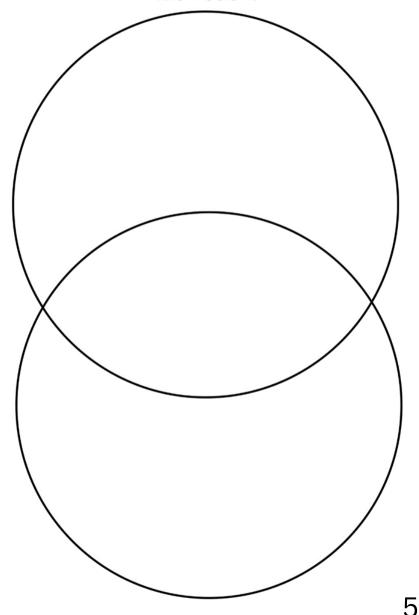
| How does | s the sun's en | ergy impact o | ur earth? |
|----------|----------------|---------------|-----------|
| | List a few exc | imples below: | |
| _ | | | • |
| | | | |
| | | | *: |

Is it true or false?

| The sun is the closest star to the earth. | | false |
|---|------|-------|
| The light from the sun star washes out all other light. | true | false |
| Day is the only time we can see stars. | true | false |
| The absence of the earth spinning is what causes the day and night pattern. | true | false |
| The earth uses a lot of the sun's energy. | true | false |
| Solar panels do not soak up energy. | true | false |
| Almost all of the earth's energy comes from the sun. | true | false |
| Center in the Square has solar panels on the roof. | true | false |

How are the sun and the earth similar? How are they different?

Use the Venn Diagram to draw or write what you know below.





Did you know?



Most stars have

| T |
|---|
| Our Solar System has planets. |
| Dr. Fleenor also mentions some other things our Solar System has, can you name two of the things he said? |
| |
| ΓHE INNER PLANETS ARE & |
| THE OUTER PLANETS ARE |
| DO YOU THINK IT MATTERS HOW FAR A PLANET IS FROM THE SUN? EXPLAIN: |
| |
| |
| |

DRAW A PICTURE OF OUR SOLAR SYSTEM. INCLUDE AS MANY DETAILS AS YOU CAN.

Riddle me this:

What do Goldilocks and the distance from the earth to the sun have in common? Explain:

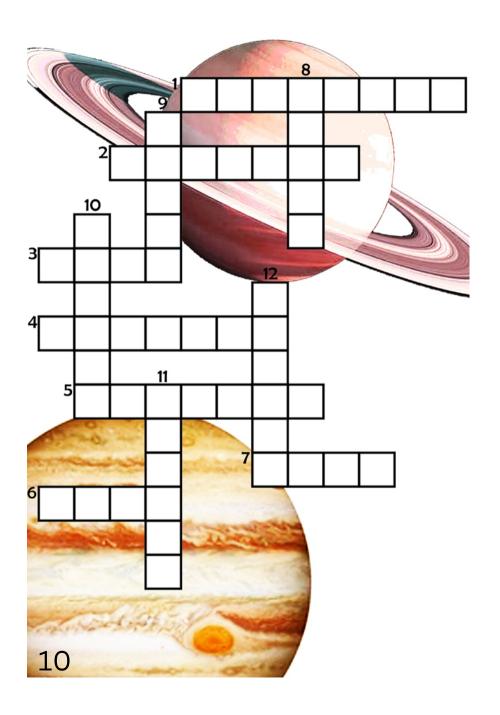
| to the sun have in common? Explain: |
|--|
| |
| Fill it in: |
| Because the sun-star shows many properties of both |
| iquids and gases, but also charged solids, we say that |
| the sun-star is made of |
| is an example of plasma on earth. |
| Draw it below! |

What do we call it..

When conclusions are drawn without absolute verification of all possibilities?

| | possibilities? |
|----------------------|---|
| | How do we use this skill in science? |
| I | How have you used this skill in your own life? |
| and $_{	extstyle -}$ | The sun star spins on it's axis,around the center of our galaxy. Illustrate that below! |
| | |
| Can you r | name the Planets? |
| | |

This Crossword Puzzle is Out of this World!



The Clues:

Across:

- 1. These miniature, rocky planets are found in the inner Solar System. There are millions of them!
- 2. Also the name of an element on the Periodic Table of Elements, and a Roman God, this planet circles the sun the fastest (because it's the closest to it! It's orbit is much shorter than the others).
- 3. The, "Red Planet."
- 4. At 11 times the size of the Earth, this is our Solar System's largest planet.
- 5. It's chilly out here! This planet is the farthest from the sun.
- 6. A, "natural satellite."
- 7. Illuminated plasma held together by its own gravity.

Down:

- 8. Our home.
- 9. Due to an incredible, "greenhouse effect" this is the hottest planet even though it is not the closest to the sun.
- 10. This planet is known for it's arrangement of ice particles, dust, and rocky debris rings.
- 11. Round, celestial bodies that orbit a star.

BONUS:

| Which planet is the only one named after a female, a Roman Goddess? | a |
|--|----|
| How many words can you make from the word, "SATURN?" Write them below: | |
| | |
| | 11 |

It's a Meteor Shower of Scrambled up Words!

Unscramble these words below that you heard in your field trip video:

| SAGTIMENM | |
|--|--------|
| LAPASM | |
| SSSTOPNU | |
| NAMESRROT | |
| Do you have any science questions? write them below! | If so, |
| | |