

Paper Plates Earth and Venus

Why is our atmosphere so important? Because it does so much for us! It protects us from harmful radiation from the Sun, it has what we need to breathe, it is part of the water cycle and it moderates our temperatures. It also “filters out” small (less than a yard or meter across) small meteoroids and comets; they burn up as they travel through our atmosphere. We could not live without our atmosphere.

What about Venus’ atmosphere? It’s not like ours at all! It’s very, very dense and made up mostly of poisonous carbon dioxide. The clouds that completely cover the planet create sulfuric acid rain! It also traps the small amount of sunlight that makes it through the atmosphere. Because the sunlight isn’t released, it makes Venus very hot – 900 degrees Fahrenheit!

In this activity, you and your child will create a representation of Earth and Venus and their atmospheres.

What you Need:

- | | |
|--------------------|--------------------|
| ✘ Two paper plates | ✘ Cotton batting |
| ✘ Earth image | ✘ Blue cellophane |
| ✘ Venus image | ✘ Clear cellophane |
| ✘ Glue | ✘ Tape |
| ✘ Scissors | ✘ Hole punch |
| ✘ Cotton balls | ✘ String |

What to Do for the Earth Plate:

- ✘ Glue the Earth image to the paper plate making sure to leave the rim of the plate bare to represent the atmosphere.
- ✘ Glue cotton pieces to different areas of the Earth template to represent clouds.
- ✘ Cover the plate with the blue cellophane and tape on back to secure.
- ✘ Tape or glue “Our Blue Skies” to the back.
- ✘ Punch a hole in the top and bottom and secure a long string to the top to make a mobile.

What to do for the Venus Plate:

- ✘ Glue the Venus image to the paper plate making sure to leave the rim of the plate bare to represent the atmosphere.

- ❖ Glue cotton batting to different areas of the Venus template to represent the thickness of the clouds on Venus; once your child is done, he or she should not be able to see the surface of Venus!
- ❖ Cover the plate with the clear cellophane and tape on back to secure.
- ❖ Tape or glue the "Venus Poem" to the back.
- ❖ Punch a hole in the top and tie to the Earth plate to make a mobile!

Parent Prompts:

Which has a thicker atmosphere, Earth or Venus?
(Venus. Earth's atmosphere is very thin; less than the rim of the paper plate, if Earth were the size of the paper plate!)

How is the atmosphere of Venus different than the atmosphere of Earth?

How are they the same?

What does our atmosphere "do" for us?
Why is it so important to life on Earth?

Does any other planet have an atmosphere just like ours?
(No! Our atmosphere is the only one that is just right for us in the entire solar system!)



Our Blue Skies



Our skies are so blue
The air way up there
Sends water our way
When its time for our share.

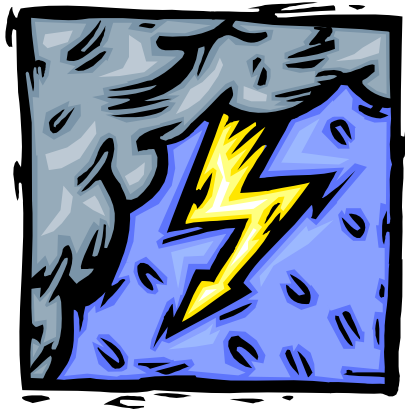
Our skies let through light
That the plants need to grow
But our air keeps out types
That will hurt us, we know.

The air moderates
The heat from the Sun
So we don't freeze at night
Or burn up with the dawn.

Our blue skies above
Are our atmosphere.
If we didn't have it
We wouldn't be here.



Heat Wave



Venus' air
is as thick as glue.
We cannot breathe it—
it's poisonous too.

The thick clouds trap
the light from the Sun,
Making Venus too hot
for us to have fun.

There water's all gas;
There are no oceans there.
Live on this planet?
We wouldn't dare!