

# **Meteorology Misconceptions**



Created by Marie @ The Homeschool Daily

**Brainstorm as many words  
or phrases that you can  
think of when you hear the  
word, “Meteorology.”**



# What words did you brainstorm for the term, “Meteorology?”

- **Weather**
- **Climate**
- **Tornadoes**
- **Hurricanes**
- **Humidity**
- **Air pressure**
- **Precipitation**
- **Temperature**
- **Wind**
- **Thunderstorms**
- **Clouds**
- **Air masses**
- **Cold front**
- **Warm front**
- **Altitude**
- **Atmosphere**
- **Heat transfer**
- **Greenhouse effect**

*Did you think of any of these words?*

# **Let's look at 10 common Meteorology Misconceptions**



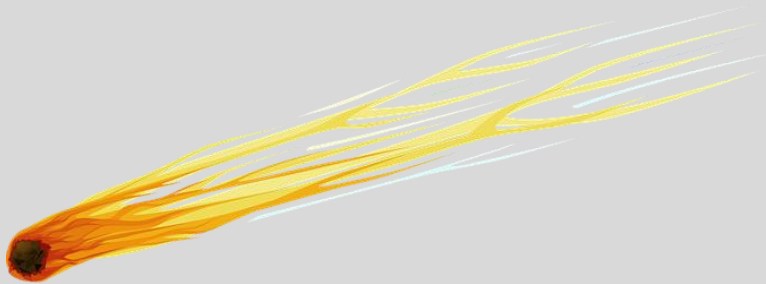
# Meteorology

## Misconception #1

### Misconception

- Meteorology is the study of meteors.

### Truth

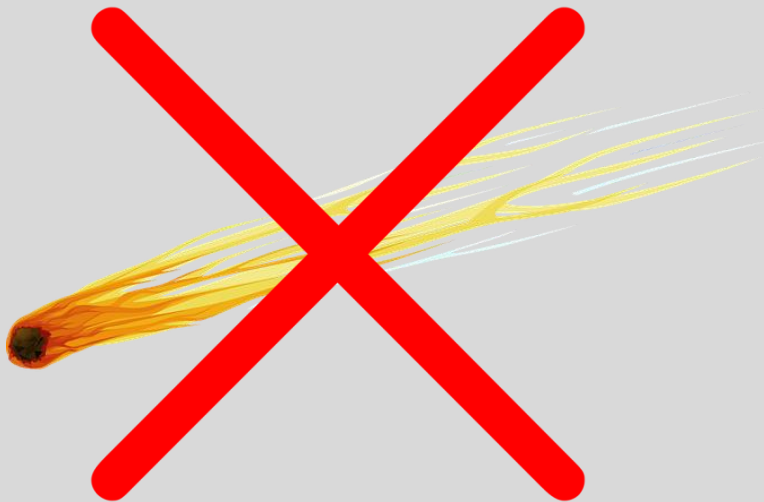


# Meteorology

## Misconception #1

### Misconception

- Meteorology is the study of meteors.



### Truth

- Meteorology is the study of weather.

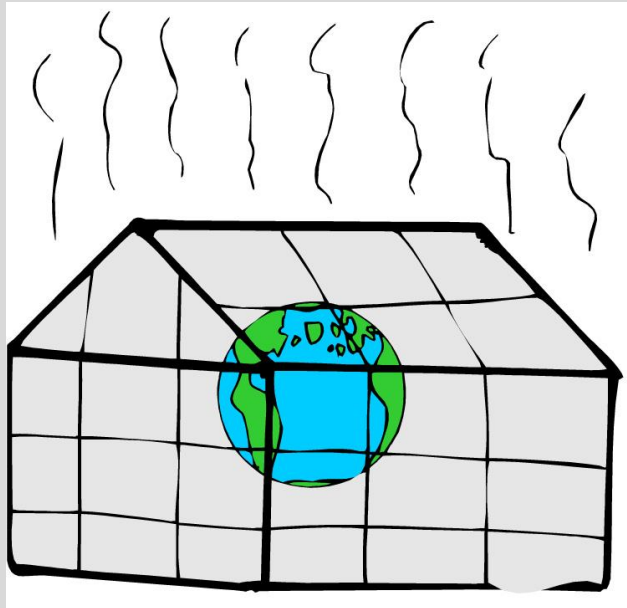


# Meteorology

## Misconception #2

### Misconception

- Our atmosphere traps the heat from the sun.



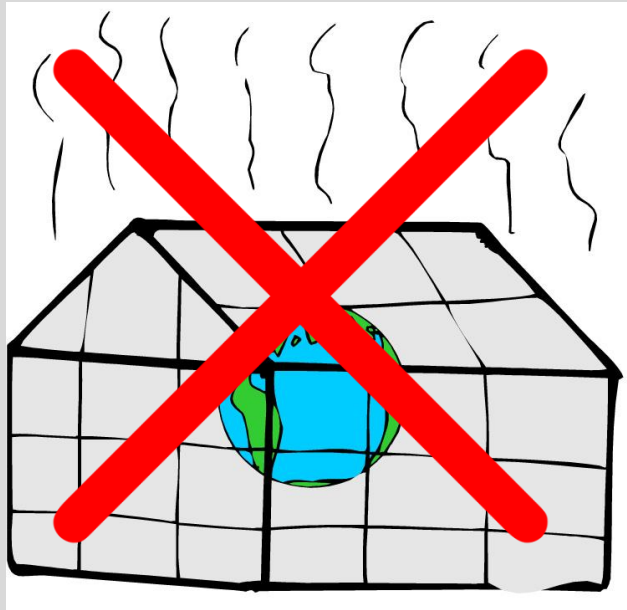
### Truth

# Meteorology

## Misconception #2

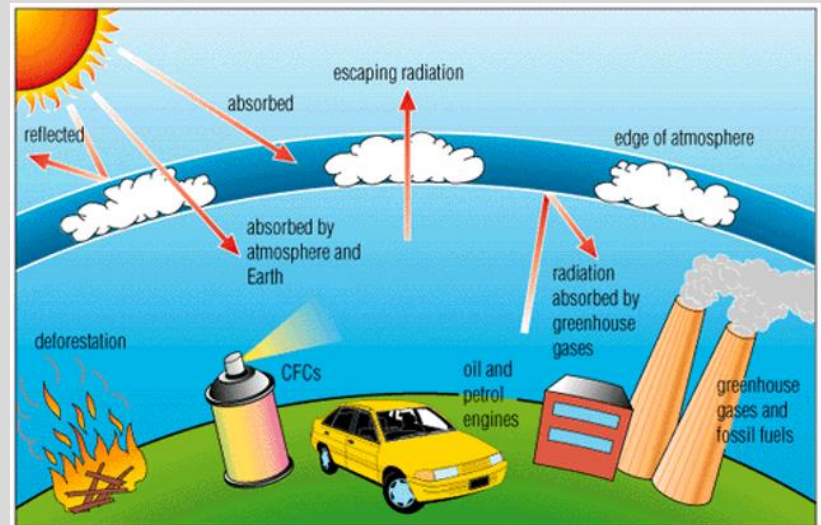
### Misconception

- Our atmosphere traps the heat from the sun.



### Truth

- Our atmosphere absorbs the radiation from the sun, heating the Earth.





# Meteorology

## Misconception #3

### Misconception

- Rain clouds move around the Earth and eventually come back to us.



### Truth

# Meteorology

## Misconception #3

### Misconception

- Rain clouds move around the Earth and eventually come back to us.



### Truth

- Rain clouds form as water droplets condense into vapor in the atmosphere. When the atmosphere can no longer support the weight of the droplets, they fall as rain.

# Meteorology

## Misconception #4

### Misconception

- Seasons are caused when the Earth moves closer to and farther from the Sun.

### Truth



# Meteorology

## Misconception #4

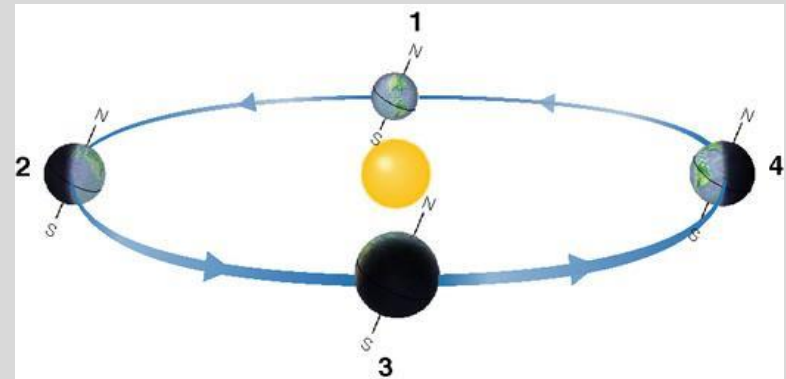
### Misconception

- Seasons are caused when the Earth moves closer to and farther from the Sun.



### Truth

- Seasons are caused by the tilt of the Earth on its axis as it rotates around the Sun. This tilt changes the angle of the Sun's rays striking the Earth.



# Meteorology

## Misconception #5

### Misconception

- We should not be concerned with events that occur on the other side of the planet because they have no effect on us.

### Truth



# Meteorology

## Misconception #5

### Misconception

- We should not be concerned with events that occur on the other side of the planet because they have no effect on us.



### Truth

- Events, such as volcanic eruptions can have global effects on weather patterns and climate throughout the world.



# Meteorology

## Misconception #6

### Misconception

- The air around the top of a very high mountain is exactly the same as the air around the bottom of the mountain.



### Truth

# Meteorology

## Misconception #6

### Misconception

- The air around the top of a very high mountain is exactly the same as the air around the bottom of the mountain.



### Truth

- The properties of the atmosphere, such as pressure and temperature, change as elevation changes.





# Meteorology

## Misconception #7

### Misconception

- Only clouds that produce rain contain water.

### Truth



# Meteorology

## Misconception #7

### Misconception

- Only clouds that produce rain contain water.



### Truth

- All clouds are condensed water molecules.



# Meteorology

## Misconception #8

### Misconception

- The oceans have no effect on our climate.



**Oceans have no effect  
on the climate.**

### Truth

# Meteorology

## Misconception #8

### Misconception

- The oceans have no effect on our climate.



### Truth

- Because the oceans are such large bodies of water, they hold a massive amount of heat. Therefore, the oceans have a great impact on climates.



# Meteorology

## Misconception #9

### Misconception

- The Sun's rays hit the Earth the same throughout the year.

### Truth



# Meteorology

## Misconception #9

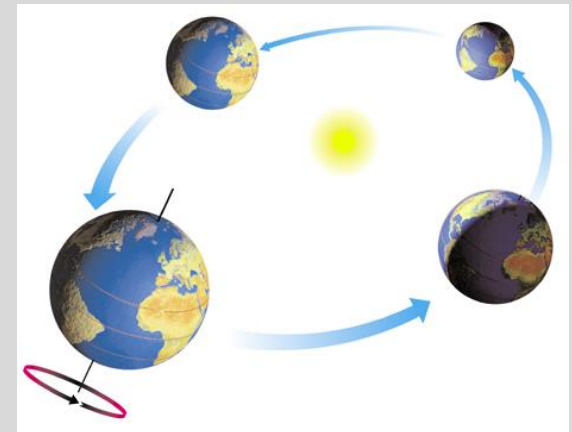
### Misconception

- The Sun's rays hit the Earth the same throughout the year.



### Truth

- The angle of the Sun's rays striking the Earth changes throughout the year. This is because the Earth rotates on a tilted axis and revolves around the Sun causing our seasons.



# Meteorology

## Misconception #10

### Misconception

- Clouds are only found in the sky.

### Truth



# Meteorology

## Misconception #10

### Misconception

- Clouds are only found in the sky.



Clouds can be in the sky and or touching the ground.

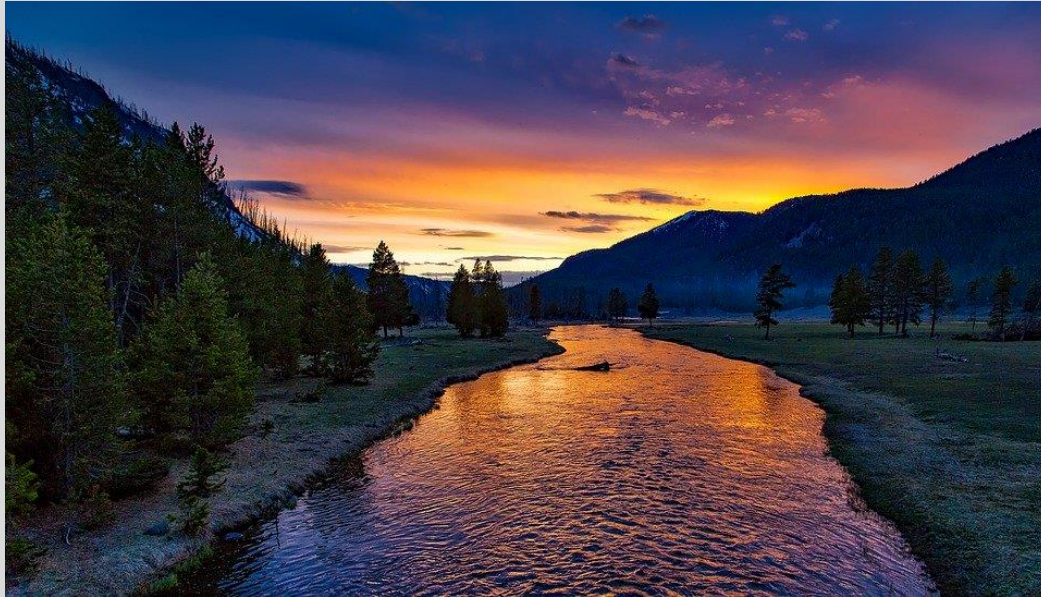
### Truth

- Clouds can form very close to the surface of the Earth (fog).





**Check out our other learning  
resources at  
[The Homeschool Daily!](#)**



“Hast thou not known? hast thou not heard, *that* the everlasting God, the LORD, the Creator of the ends of the earth, fainteth not, neither is weary? *there is* no searching of his understanding.” Isaiah 40: 28



Hi! Thank you for your download. I'm so glad you were able to find a school tool you can use. Please feel free to use this activity for your own personal use or classroom. Hope it works out great!

♥ Marie

**TERMS OF USE:** THIS DOCUMENT IS PROVIDED TO YOU FOR YOUR OWN PERSONAL USE. YOU AGREE THAT YOU WILL NOT COPY, REPRODUCE, ALTER, MODIFY, CREATE DERIVATIVE WORKS, OR PUBLICLY DISPLAY CONTENTS AS YOUR OWN. NO REDISTRIBUTION. YOU MAY NOT REPRODUCE, REPACKAGE, OR REDISTRIBUTE THE CONTENTS OF THESE DOWNLOADS, IN WHOLE OR IN PART, FOR ANY REASON. THIS INCLUDES "GIVING" SOMEONE YOUR COPY THAT YOU ARE NO LONGER USING OR HOSTING THEM ON DROP BOX OR FACEBOOK FILES. PLEASE REFER OTHERS TO [WWW.THEHOMESCHOOLDAILY.COM](http://WWW.THEHOMESCHOOLDAILY.COM) TO DOWNLOAD THEIR OWN COPY.

#### YOU MAY:

- Save the files on your computer and print off copies for your family or classroom whenever you would like.
- Link directly to my blog to share my files with others.
- Post to your blog using pictures of your child using my curriculum, as long as proper credit is given to [www.thehomeschooldaily.com](http://www.thehomeschooldaily.com)

#### YOU MAY NOT:

- Host or store my files on your own or other sites (this includes drop box, the cloud, and any other site off your personal computer)
- Alter or Sell files to make a profit. All files are for personal/classroom use only.
- All downloads are copyright protected. Not to be distributed, transferred, or shared in any form.

