Thunderstorms and Rainbows

Color and light!



After a rain, the sun comes out and sometimes we see a rainbow!



A rainbow is made by full light passing through a material that bends the different wavelengths of the light and breaks the light into the colors of the spectrum.

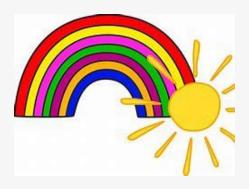


The longest light waves look red, then orange, yellow, green, blue, indigo and the shortest, violet.









You can be a finger rainbow, singing the song to the tune of I'm a Little Teapot, or read the story!

I'm a little rainbow glowing bright (arched arm)
Hanging in the sky daylight. (fist up)
When rays pass through the drops they spread,
(fingers spread)

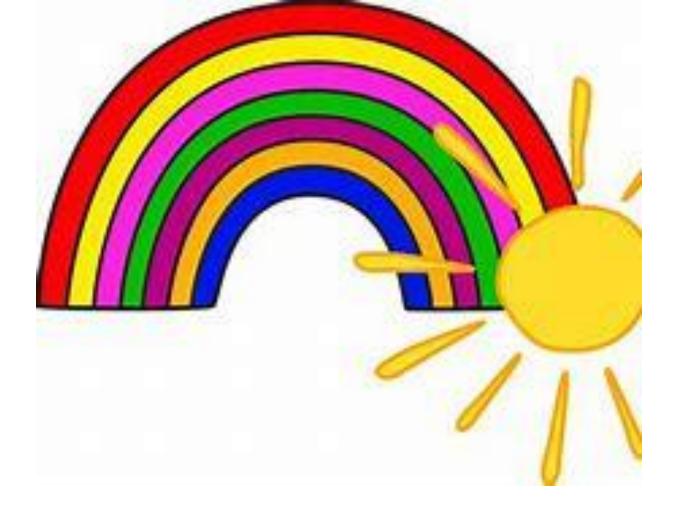
Violet, all the way to red!! (left to right)

l'm a Little Rainbow





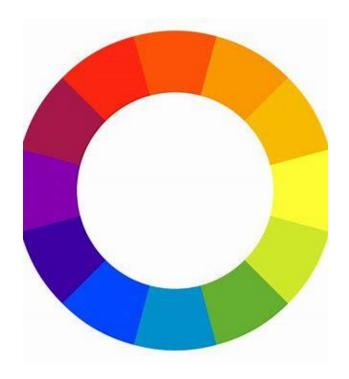
I'm a little rainbow glowing bright



Hanging in the sky daylight.

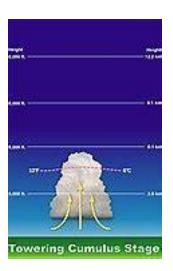


When rays pass through droplets then they spread,



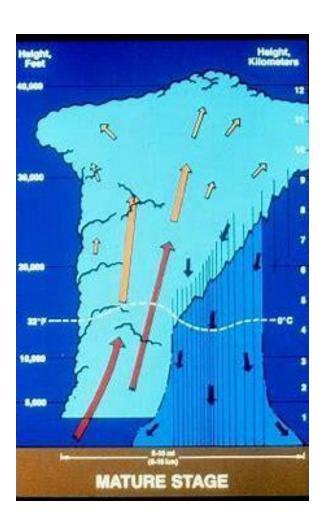
With colors violet back to red.

Stages of a thunderstorm--The cell is the building block of a thunderstorm. The life of a thunderstorm cell ranges from 30 to 60 minutes. Thunderstorm cells have three distinct stages:



In the developing stage of a thunderstorm a cumulus cloud is being pushed upward by a rising column of air (updraft).

It soon looks like a tower (called towering cumulus) as the updraft continues to develop. There is little to no rain during this stage.



Stages of a thunderstorm

The thunderstorm enters the mature stage when the updraft continues to feed the storm, and precipitation begins to fall out of the storm, creating a downdraft (a column of air pushing downward).

When the downdraft and rain-cooled air spreads out along the ground it forms a gust front, or a line of gusty winds.

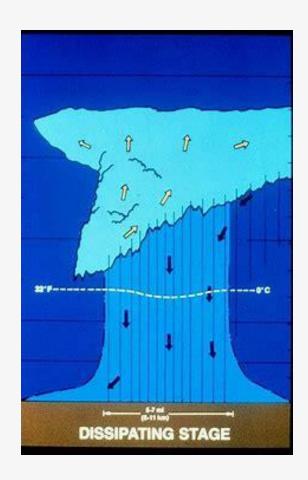
Storms, often reach to 40,000 to 60,000 feet. The mature stage is dangerous and the most likely time for hail, heavy rain, frequent lightning, strong winds, and tornadoes.

Stages of a thunderstorm

A large amount of precipitation falls, and the updraft is overcome by the downdraft-the dissipating stage.

The gust front moves out from the storm and cuts off the warm moist air that was feeding the thunderstorm.

Light rain and weak outflow winds may remain.



Thunderstorm activity—be a thunderstorm!

First the wind—blow softy, now blow loudly

Then the gentle rain—light taps with fingertips—turning into heavy rain, banging hands on the ground.

Now the thunder presages the storm—clap your hands—now louder louder!

And lightning—flash your finger.

The storm begins to pass—heavy rain banging, light rain tapping and blowing!

You can be a musical thunderstorm with mini-fan blow, rain stick rain, cymbals thunder, and flashing head lamp lightning,



DIY Rainbow Walk

Get a prism and find some sun. Look through the prism at the trees to see rainbow leaves. Focus the rainbow so it moves to your toes—play with it, experiment!



Art for Little Hands

Give the children globs of the 3 primary colors and let them mix colors with Q-tips to dab on a half small paper plate.

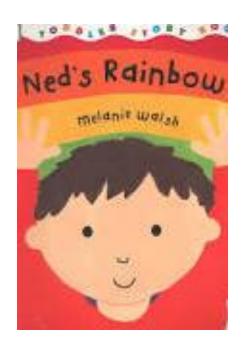
For thunderstorm art place small cell bubblewrap under thin paper and use sidewalk chalk to make a rubbing, or let them coat the wrap with paint and do bubble wrap printing..

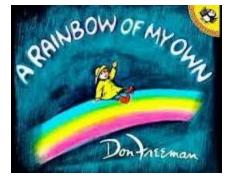




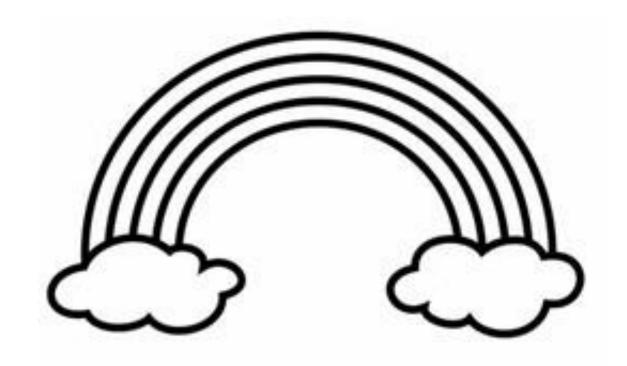
We are learning how two authors can take one idea and write two different stories about it. In <u>Ned's Rainbow</u>, Ned loves rainbows and wants to keep one. He is very sad that he can't keep the rainbow until his mother devises a creative way to solve the problem.

A Rainbow of My Own tells the story of a little boy and his imaginary and real rainbows. https://www.youtube.com/watch?v=QWn7HAxc9p8and real rainbows.





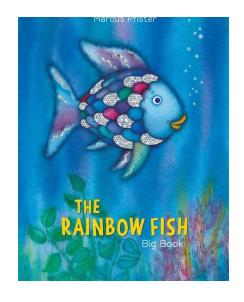
Would you like to have a rainbow of your own? You can design a rainbow of your very own!

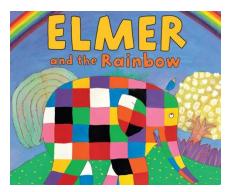


Both rainbow books teach us that when we give something away—when we share—we have more happiness. Elmer shares his colors to give the rainbow colors and Rainbow Fish learns that when he shares his glittery fins, he makes the whole ocean happier.

https://www.youtube.com/watch?v=tv TnDFiCew

https://www.youtube.com/watc h?v=r9mryuEKkKc





You can be an engineer and design a rainbow fish or a patchwork elephant!

