



Survival Kit for the Imagination

Lesson 1.2

The Ten Main Clouds

Getting More Specific with Cloud Types



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Objective:

This lesson is about learning to recognise the ten main types of cloud (known officially as cloud 'genera'). Through the use of observation and creativity, students will find out what makes them different and what similarities there are between the different ones. They will choose favourite ones to paint or create with collages. Students will expand emotional awareness, how to observe emotions like they observe clouds, and a new mindful strategy.

Lesson plans, links, and resources available at cloudappreciationsociety.org

Time: 45-90 minutes depending on activity options selected and teacher preference.

Materials

- The Ten Main Clouds Fact sheet
- The Ten Main Clouds Cheat sheet
- Colouring and Labeling Clouds sheet
- 4-7-8 Breathing sheet
- Cloud Breathing Chart & Cards
- Emotions Chart
- Big and Little Emotions Chart and Cards

Lesson Prep

- Hang Cloudspotting Chart Poster
- Print the Ten Main Clouds Cheat sheet
- Ready the screen or print as double sided Ten Main Clouds Fact sheets to hold up.
- Ready the Ten Main Clouds video

Resources

- The Ten Main Clouds video <https://vimeo.com/541823392>

Previous Lesson Review

Review previous lesson: Remind students they learned about becoming aware of the clouds, if they look up and notice them often, they will notice all different types of clouds. This lesson explores the Ten Main Clouds.

Lesson Intro: Welcome to the Ten Main Cloud Types

Introduce the class to our video describing the ten main clouds.

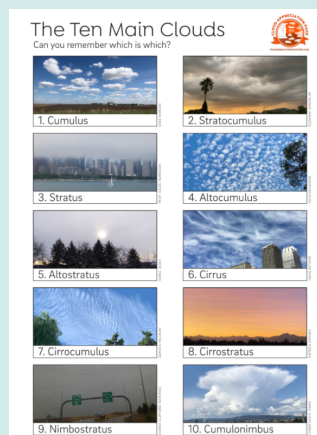
Each and every cloud is unique, but we group them into ten main types based on how they look and how high they are: whether they are low, mid-level or high clouds. These ten main types are known as cloud 'genera', and you can think of them as each having their own character or personality. Start by showing the Cloudspotting Chart if you have this on the wall.



The Ten Main Cloud Type Guides

With students referencing the Ten Main Clouds Cheat sheet, introduce the clouds using the Ten Main Cloud Fact sheet images and info, asking students to consider and think about:

- What basic group does each cloud fall into – clumpy, layered or wispy?
- How high above the ground are they? How can they tell?
- Are they made of water droplets or ice particles? How can they tell?
- Do students have a favourite cloud and why?
- Encourage students to think about what clouds they would prefer to be in the sky in different situations and why (walking, shopping, holiday, sightseeing, or long car journey).



1. Cumulus

FACTS:

- Low cloud level
- Fair-weather cloud
- Solid looking
- Cauliflower tops
- Flat bases
- Brilliant white on sunny side
- Shaded on the side that is away from the Sun
- Clumps are individual, not joined into a layer

IDEAS FOR DISCUSSION OF FEELINGS:

- Always forms on a sunny day
- The best clouds for finding shapes
- In unstable conditions, a tiny Cumulus can grow into huge storm cloud

LOW CLOUDS

The 'Personalities' of the Ten Main Clouds

You can think of each cloud as having a feeling – almost a personality.

Ask the students to think about which cloud is most like their own emotions at the moment.



Activity Options



Cloudspotting outside or accessing a webcam



Take a walkabout outside, if the weather is right. If it's pouring with rain, a flat overcast sky, or there are no clouds, go to the main webcam page and chose different parts of the world they want to investigate to see different clouds. Make the webcam link available so students can explore the world of clouds in their free time.

- Students going outside can work in pairs or small groups.
- Remind students to use all their senses when cloudspotting.
- Can they identify any of the three general types of cloud in the sky?
- Encourage secondary students to take a photo of a cloud with their phones.
- Ask questions such as: How do the cloud change over time? Is it moving across the sky? They might have to slow right down to notice any change.
- Can they find a cloud that looks like something?

Discussions

- What did you observe?
- What did you notice that you may not have ever seen before?
- What does the environment looks like in one part of the world versus another.
- How are the clouds similar and different?

Tracking your cloudspottings

As the class continues to have outside observations, it can be enlightening to track over time what clouds are often in the sky.

- What cloud did we see last observation?
- What clouds do we see most often?



'I Am a Cloud' and Matching Cloud Name Games



Primary

Have printed pictures with information on the back. A student reads the information. Others guess which cloud it is. Show the picture when a pupil gets it right. The winner gets the next card.

Secondary

Matching Names of Cloud with Cloud Type Photo. Use 10 main cloud type printouts. Cut name off bottom. Students working in pairs match names to photos.



Coloring Clouds and Finding Online Clouds by Level

Primary

A simple worksheet split into quarters labelled Cumulus, Stratus, Cirrus and Cumulonimbus with simple line drawings of each cloud would be useful for Primary age children. They could colour in the pictures with blue skies for Cirrus and Cumulus, grey for Stratus and a dark based towering cloud with yellow lightning for the Cumulonimbus. Ask them to choose which feels the happiest and which feels the saddest.

Secondary

Have students break into groups. They will look online for cloud photos and save them into an electronic slide show into a slide for each of level of Low, Mid-level, High, and Multi-level clouds. Students present their findings.



Alternative Activities



Primary

- Cloud bingo card (could be paper or virtual). To carry around and tick off as you spot the different clouds. Not being able to find certain types would lead to discussions about the reasons for finding/not finding them.
- Children can make their own Cloud Selector identification wheel, a printable wheel children could cut out and paste pictures on.

Secondary

- Compare the student created reference sheet with the Ten Main Clouds part of the Cloudspotting Chart. Compare commonalities/differences in categorisation. Introduce the relationship between clouds and certain types of weather in different parts of the world, and then ask students to monitor clouds for a week and make weather predictions for a week. Discussion - what did they get right?
- Assign individual clouds to each student and make them "experts". You can have students work on your 10 in groups, or you can add unusual clouds (lenticular, etc.) to the list to make more options. Students can then create digital posters or presentations to share with the class.





Mindfulness

Emotions: Name It To Tame It



Remind students mindfulness is about observing our bodies and emotions, in the moment, without judging what is happening. Just like we observe clouds, we watch and observe our bodies, emotions, and sensations, making mental notes, and purposefully taking breaths.



Fight-Flight-Freeze

Fight, flight, freeze response is natural and keeps us safe. When we feel threatened the body releases chemicals that make our eyes focus better, our breathing to increase to feed the muscles to function stronger and faster. It is the feeling of being threatened that prompts us to get out of danger or stop what we are doing. Although this response is natural and keeps us safe, at other times, our brain keeps alert to look for threats and can interpret unthreatening things we may see, hear, smell, or even think about. For example, you could get scared by a tiger at the zoo, then when you see a picture of a tiger, your brain could react as if the picture was the actual tiger and original threat.

Emotions Come & Go

Emotions, just like clouds, come and go. But it's hard to know what to do with the emotion when it sinks uninvited into the body. We can learn to take breaths on purpose, elongating or pausing between breaths, to help the emotions move through our bodies more easily. It's like watching a rainstorm come and go, we can watch the emotions come and go.



Emotions Charts

Share with students the Emotions Charts. You can think of emotions as being like clouds. Whatever emotions you have right now won't hang around forever. Have you been angry or sad before? Those emotions come and go and usually don't stay the same. Students could use the ten different cloud types as a way to describe which emotion they have each day or share an example with a partner or small group.

Review Emotions Chart. Just like using your imagination to see cloud shapes, sometimes it takes your imagination to identify the emotions. Sometimes it's hard to identify the emotions we are experiencing at all. Our brains begin to calm down when we can name the emotion. This is called, "Name it to Tame it," and it means that when we can name our emotions, our body begins to calm down.

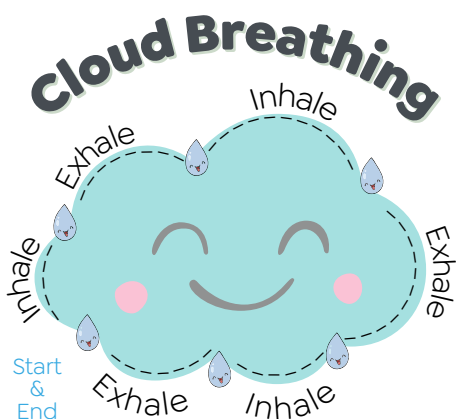


Primary

Introduce Cloud Breathing with the cards, giving each student their own or use the large chart as a group. Guide students how to start with their finger at the start, inhale to the next raindrop, pause, then exhale, as they trace their finger around the cloud.

Secondary

Either watch the video for guided directions or read the 4-7-8 Breathing Handout. Students can be divided into groups and given the opportunity to each lead the group and guide their peers through the directions.



Cloud Breathing

1. Identify an emotion.
2. Begin with a finger on Start.
3. Inhale tracing the cloud to the next raindrop.
4. Pause a moment.
5. Exhale to the next raindrop and pause.
6. Continue to trace the cloud with inhale, pause, exhale pattern.

Check in with the body and mind. Invite students to notice what changed and to share their observations with the group.

Teacher Tip



Teachers may observe discomfort in students, moving about, unable to quiet down enough to do mindfulness. Allow this movement and discomfort. A quick lesson is to acknowledge just how awkward, weird, or strange it feels to pay attention to the breath or look at emotions. For some students, this is a first. Affirm this strange newness. Reassure them that everytime they do mindfulness, it will get easier and less awkward.

Review Previous Strategies



Assessment

Guide students to name all the Ten main cloud types. Which one do they want to look for in the coming week? Encourage those with phones to take pictures and return for show and tell.



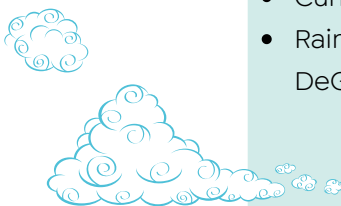
Conclusion

Although all the clouds are made up of water each cloud is different, forming in different conditions and so appears in different shapes and produces different weather. Just as the clouds are different, each student is different and experiences emotions differently. Encourage students to identify their emotions as they come, and refer to their Cloud Breathing Cards to help the emotions move through themselves more easily.



Photo Credits

- Cumulus clouds spotted by Mike Nordin
- Stratocumulus clouds spotted by Suzanne Winckler
- Stratus clouds spotted by Prof Giles Harrison
- Altocumulus clouds spotted by Vicki Kendrick
- Altostratus clouds spotted by Karel Jezek
- Cirrus clouds spotted by Tania Ritchie
- Cirrocumulus clouds spotted by Adria S Hillman
- Cirrostratus clouds spotted by Patrick Dennis
- Nimbostratus clouds spotted by Donna Clifford Martinez
- Cumulonimbus clouds spotted by Christian H. Swan
- Rainbow and Contrails spotted by Wendy DeGraffenried



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Little and Big Emotions Chart

Observe your emotions like a cloudspotter

Little

1

2

3

4

5

Big



Little and Big Emotions Card

Observe your emotions like a cloudspotter

Little 1 2 3 4 5 Big



Little and Big Emotions Card

Observe your emotions like a cloudspotter

Little 1 2 3 4 5 Big



Little and Big Emotions Card

Observe your emotions like a cloudspotter

Little 1 2 3 4 5 Big



Little and Big Emotions Card

Observe your emotions like a cloudspotter

Little 1 2 3 4 5 Big



4-7-8 BREATHING

Sheet Lesson 1.2

- Step-by-step Directions: Read through each step, giving a moment or two between each. Students can be divided into small groups of 3-4 giving the option of repeating this practice and allowing students to be leaders by reading the directions.
- Show the Cloud Emotions Chart. Become aware of your body and any discomfort or sensations. Rate the discomfort or intensity of emotion 1 out of 10. 1 for low intensity or pain, 10 for high intensity or severe pain.
- Before doing any breath work, listen to the steps and then we will start.
- Inhale for 4 counts, expanding your chest to fill to the lower parts of your lungs.
- Hold for 7 counts. (The leader or teacher can count out loud or use their fingers to count up to 7). Pinch your lips like you are blowing up a balloon. Like this. Exhale for 8 counts.
- We'll repeat this 4 times.
- Inhale 1-2-3-4
- Hold 1-2-3-4-5-6-7
- Exhale with pinched lips 1-2-3-4-5-6-7-8
- Check in with current emotions or body sensations. Rerate your discomfort, pain, or emotions. What did you notice? What shifted? What was the before number vs the after number. Who experienced a shift?
- Finding peace, calm, and relaxation can be as simple as watching clouds and doing a simple mindfulness breathing exercise like 4-7-8 Breathing.



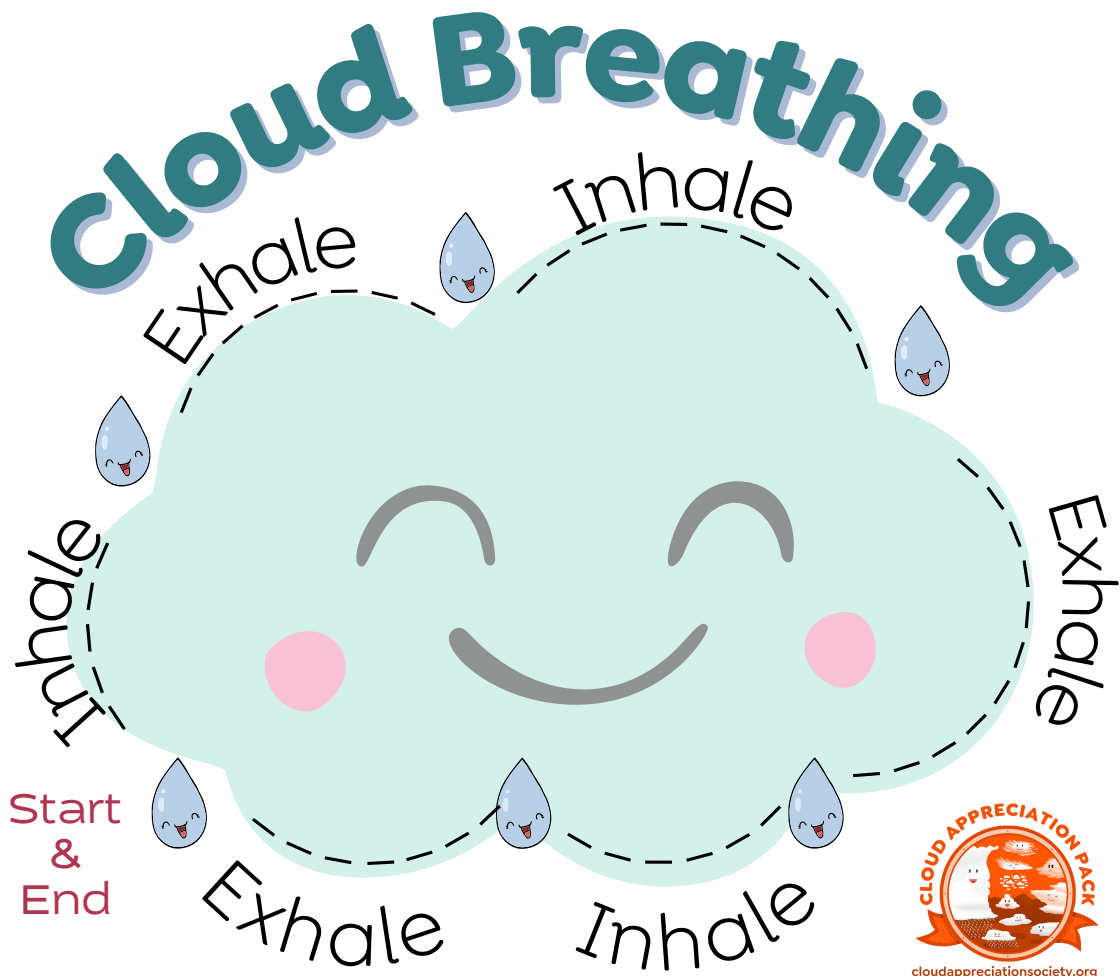
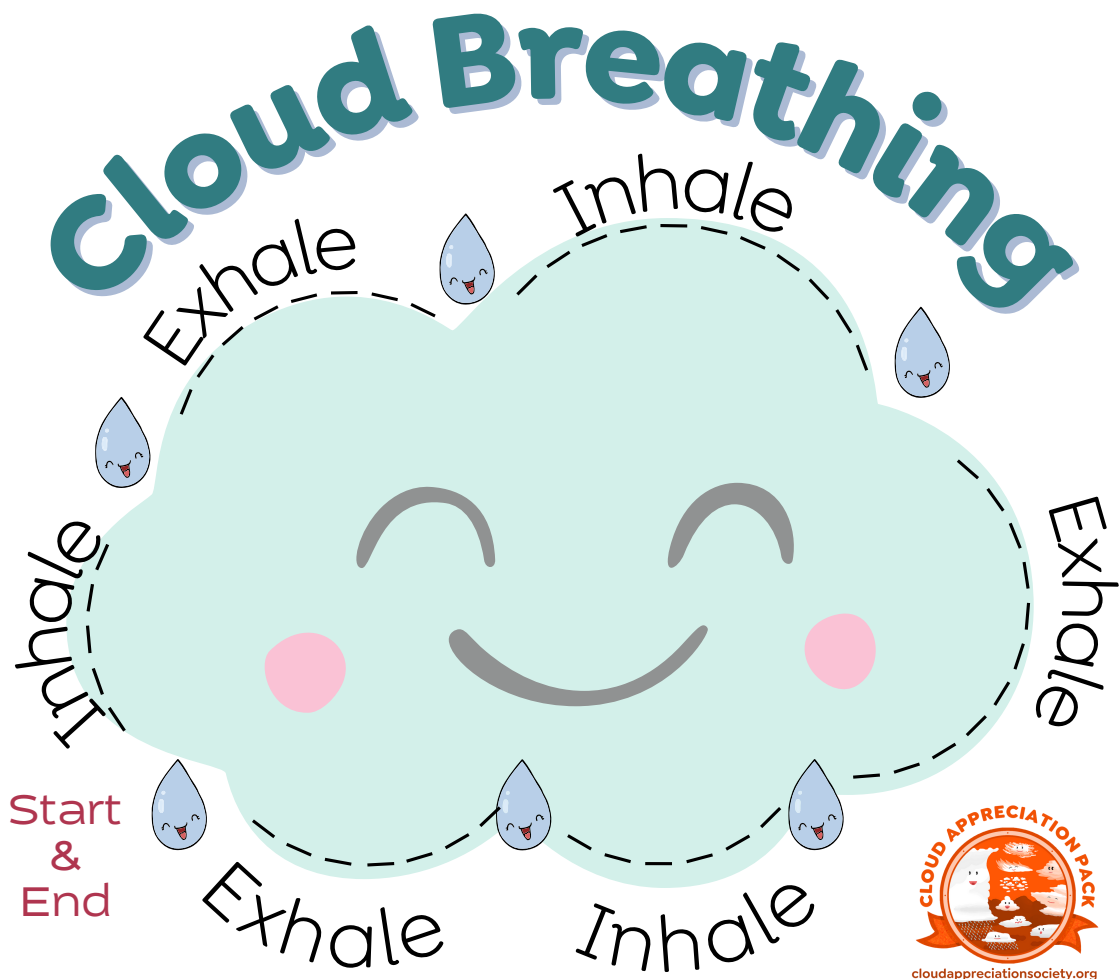
Cloud Breathing



Trace the cloud with your finger

1. Inhale
2. Pause
3. Exhale



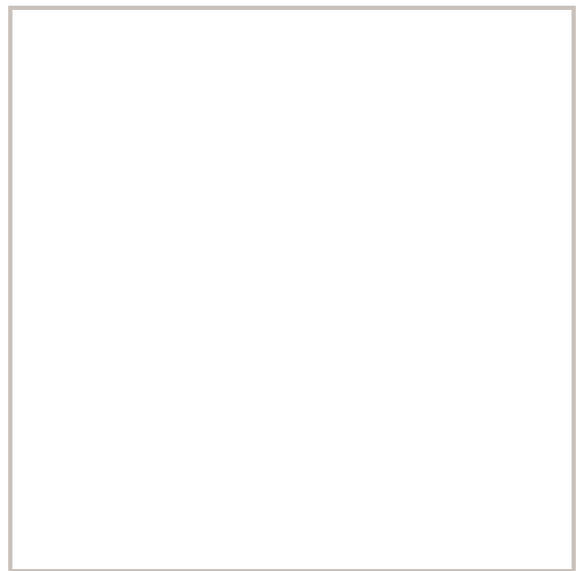


Colour & Label the Clouds



Color the sky in each picture, then label the cloud. You get to draw one cloud that is not shown.

- Cumulus
- Cirrus
- Cumulonimbus
- Stratus





Emotions Chart

Observe your emotions like a cloudspotter

Needs are Unmet

Afraid- dread, frightened, panicked, petrified, scared, worried

Annoyed- disgruntled, exasperated, frustrated, impatient, irritated, irked

Angry- enraged, furious, irate, livid, resentful

Aversion- animosity, appalled, dislike, hate, hostile, horrified

Confused- ambivalent, dazed, lost, torn, perplexed

Disconnected- alienated, bored, cold, detached, distant, numb

Disquiet- agitated, disturbed, perturbed, rattled, startled, upset

Embarrassed- ashamed, flustered, guilty, mortified, self-conscious

Fatigue- beat, burnt out, exhausted, tired, weary

Pain- agony, devastated, grief, hurt, lonely, miserable, regretful

Sad- depressed, dejected, despair, forlorn, gloomy, hopeless

Tense- anxious, cranky, distressed, edgy, frazzled, irritable, stressed-out

Yearning- envious, jealous, longing, nostalgic, pining, wistful

Needs are Satisfied

Open- confident, connected, sympathetic, interested, satisfied, friendly.

Loving- considerate, affectionate, sensitive, tender, loved, caring.

Happy- blissful, joyous, delighted, gleeful, thankful, ecstatic, mellow.

Interested- fascinated, intrigued, inquisitive, curious, amazed, attentive

Alive- playful, courageous, energetic, optimistic, frisky, spirited, funny.

Positive- eager, keen, inspired brave, hopeful, beautiful, creative, spunky

Peaceful- calm, good, comfortable, content, quiet, relaxed, balanced

Strong- reliable, tenacious, secure, honest, excellent, complete, solid

Relaxed- glowing, radiant, smiling, grounded, open-minded, trusting, light

How Intense?

9

1



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