

# STARTER PROGRAM – CLOUD BINGO

Though staring up at the clouds and playing bingo, don't sound like overly fun activities, the play that will inevitably happen will be. Cloud Bingo is an activity that gives some introduction to types of clouds and their names, but also allows for extended outdoor time with a rather quiet activity that can let the mind wander. However this activity works itself out, it's a win.

**Goal: To familiarize yourself (or your students) with the types of clouds in our sky, and to determine weather patterns/formations from knowing their names/what they are made of. Also allowing ample room for imagination.**

**Resources/Materials:**

**Cloud Bingo Card**

**Anything to mark your squares with**



## SIMPLE SCIENCE OF CLOUDS

Clouds look light and fluffy (except for the scary black storm clouds anyway), but researchers have actually learned that your average cumulus cloud (the white fluffy one I mentioned earlier) weighs around 500,000 kg! That's like hanging 83 average sized African Bush Elephants in the sky! How can they weigh so much? The simple science behind clouds is that they are made of ice and water. When warm air (which contains water vapour) rises and cools, it condensates and forms water or (depending on the height in the sky) ice crystals, to form clouds.

## TYPES OF CLOUDS

Clouds are categorized by what level they form in the sky. Categorizing them this way, also means they are categorized by how much water they contain vs ice crystals. **Note: It is important to make connections that play off of the context of what your students are exposed to, or already have a knowledge of. Think of this example: The higher the cloud forms in the sky, the more of it is made up of ice crystals. (Remember, space is cold, so whatever is closer to outer space must be colder).**

### High Level Clouds (Form above 6000 metres)

Cirrus - wispy white clouds (good weather)

Cirrocumulus - fluffy cotton balls clouds (good weather)

Cirrostratus - flat clouds that stretch across the sky (appear overcast, signal it might rain in the coming days)

### Mid Level Clouds (Form between 2000 and 6000 metres)

Altostratus - dark grey clouds (usually a sign of rain)

Alto cumulus - small, white and fluffy (good weather)

Nimbostratus - thick, grey clouds that bring rain or snow

### Low Level Clouds (Form below 2000 metres)

Stratus - flat and cover a lot of the sky (might bring a drizzle of rain with them)

Stratocumulus - puffy and grey (might turn into cumulonimbus clouds)

### All Level Clouds (Form from below 2000 metres and above 6000 metres)

Cumulus - tall, white and fluffy (stretch in high towers from low to mid levels, good weather unless they get too tall)

Cumulonimbus - very tall, column-like (stretch from the bottom level to the highest level, produce violent storms, rain and even tornadoes)

**Once you're familiar with the types of clouds you're looking for, head on out and get playing Cloud Bingo! It's very unlikely that you'll see all the types of clouds in the sky at once, but use your imagination to see what shapes of clouds there are to fill your squares and shout Cloud Bingo when you're done!**