

Use your Cloud Teller to practice vocabulary, learn different cloud types, and help with CERES S'COOL cloud observations.



Clouds are an important part of our atmosphere, and scientists are studying how they affect our weather and climate. Clouds affect our overall temperature or energy balance of the Earth and play a large role in controlling the planet's long-term climate. Satellite instruments as well as your ground observation provide one more piece of the puzzle.

Visit the links below for more S'COOL cloud observation resources:

- **What to Observe:** <http://science-edu.larc.nasa.gov/SCOOOL/ForParticipants-whatobs.html>
- **Observation Tips and Tricks:** <http://science-edu.larc.nasa.gov/SCOOOL/lintips.html>
- **Cloud Chart:** http://science-edu.larc.nasa.gov/SCOOOL/Cloud_ID.php
- **Print a Ground Observation Form and Report Your Observations On-line:**
https://scool.larc.nasa.gov/en_rover_obs.html
- **Register your class for the CERES S'COOL Project:**
<http://science-edu.larc.nasa.gov/SCOOOL/register/>

To build the Cloud Teller, see instructions on the back of this page.



The Student Cloud Observation On-Line

Cloud Teller

<http://science-edu.larc.nasa.gov/SCOOOL/>

<p>Broken 50-90% clouds</p> <p>Overcast >90% clouds</p>	<p>Stratus Low, gray clouds that may have very little variation. Layered, featureless clouds.</p>	<p>Cumulus A puffy white cloud often described as "puffy" or "cotton-like" in appearance, cumulus clouds may appear alone, in lines, or in clusters.</p>	<p>Scattered 25-50% clouds</p>
<p>Nimbostratus Low-level clouds that cover the entire sky with broad sheets, and that produce steady rain of low to moderate intensity with no thunder and lightning.</p>	<p>Contrails A trail of condensation formed due to the exhaust of jet aircraft.</p>	<p>Fog A visible gathering of water droplets suspended in the air near the Earth's surface.</p>	<p>Cumulonimbus A type of cloud that is tall, dense, and associated with thunderstorms and other intense weather.</p>
<p>Cirrus High feathery clouds that usually mean a change in weather is on the way.</p>	<p>Altostratus A midlevel cloud that has individual cloud elements or heaps of cloud.</p>	<p>Cirrocumulus High-altitude clouds that can produce precipitation and are usually short-lived.</p>	<p>Altostratus A mid-level cloud that is featureless and formless.</p>
<p>No Clouds 0% clouds</p> <p>Clear <10% clouds</p>	<p>Cirrostratus Thin, sheetlike high clouds that often cover the entire sky, but allow the Sun and Moon to shine through.</p>	<p>Isolated 10-25% clouds</p>	

How to fold your Cloud Teller:

1. Cut out the Cloud Teller Square on the solid black lines (fold on the dashed lines, cut on the solid lines).
2. Place the cloud teller face down on the table. You should see no writing or pictures.
3. Fold the Cloud Teller in half, bottom to top, and unfold. Now fold the Cloud Teller in half, right to left, and unfold it again. You should see 4 smaller, equal sized squares on the paper in front of you.
4. Fold all the corners in to the center point. You should have a smaller square with the cloud cover amounts and numbers facing you.
5. Flip the Cloud Teller over, you should see the different cloud types. Fold all the corners to the center point again. You should have a smaller square with numbers one through eight facing you.
6. Fold the Cloud Teller in half, bottom to top, and unfold. Now fold the Cloud Teller in half, right to left, and unfold it again.

How to use your Cloud Teller:

1. Place the Cloud Teller, numbers up and try to bring the four corners together in the air, pockets should be forming on the underside of your Cloud Teller.
2. Put you Thumbs in the 2 pockets closest to you and your index fingers in the pockets furthest from you.
3. Open and pinch you fingers together to move the Cloud Teller, pull your pinched fingers apart, right and left, as well.
4. The goal is to get to a cloud in the center of the Cloud Teller, Ask a partner to pick a word on the outside of the Teller when it is closed, move the Teller in rhythm to each letter while spelling the word they picked out loud. Let your partner chose a number, do the same movements while counting aloud. Let them pick a number once more, lift the number to reveal a cloud underneath.

