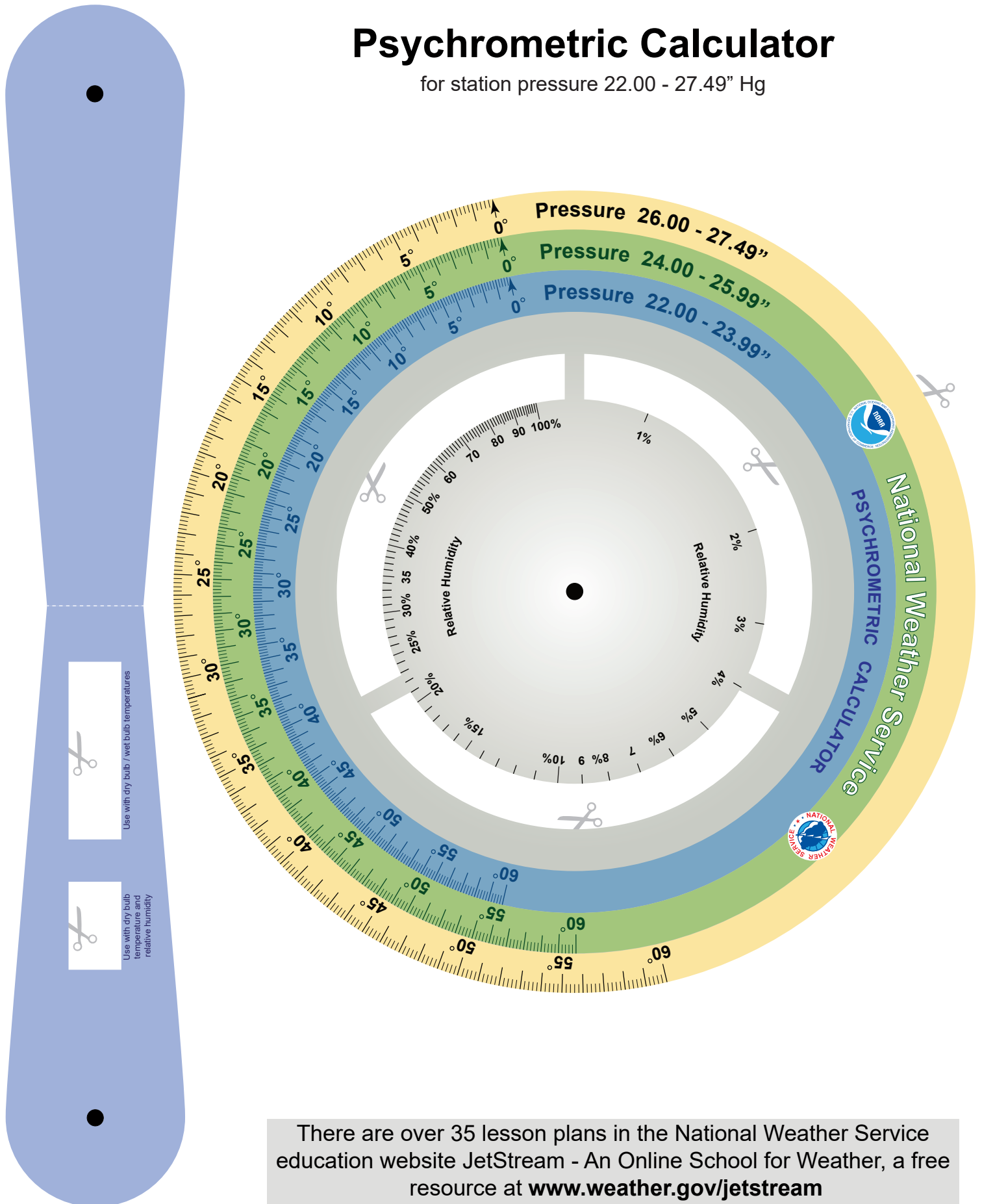
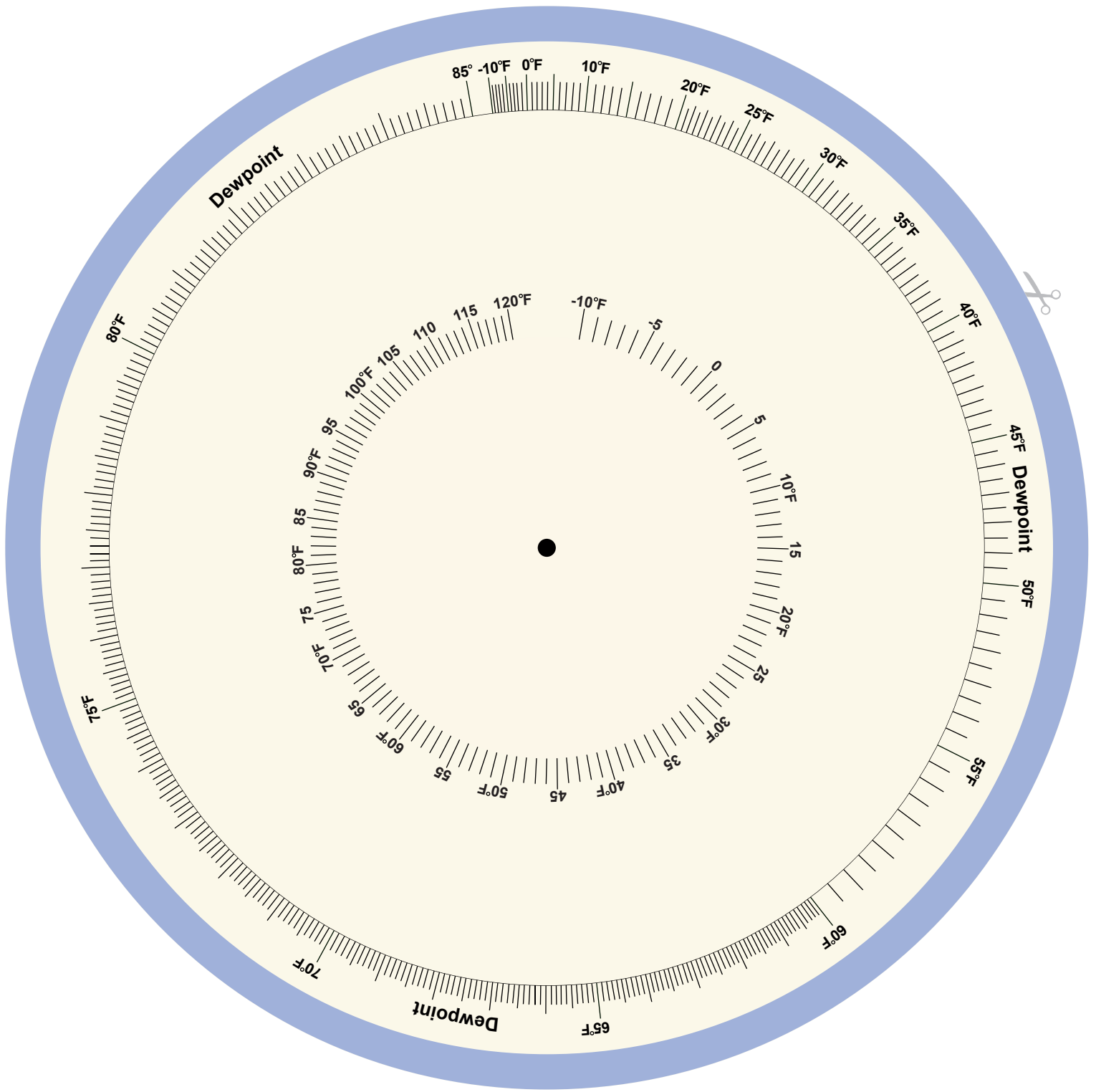


Psychrometric Calculator

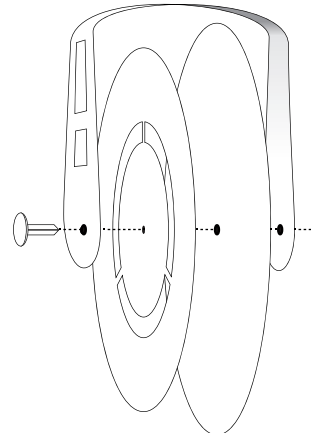
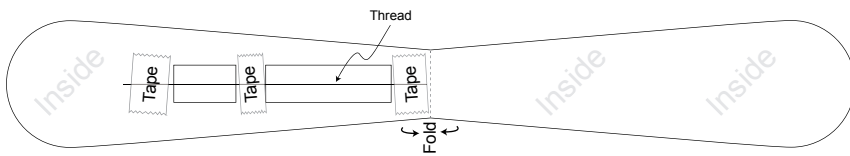
for station pressure 22.00 - 27.49" Hg



There are over 35 lesson plans in the National Weather Service education website JetStream - An Online School for Weather, a free resource at www.weather.gov/jetstream



On the inside of the 'paddle' (non-printed side) tape dark sewing thread lengthwise down the center of the openings. Fold the paddle in half and place around the two wheels securing all pieces with a brass fastener.



The **Psychrometric Calculator** is used to determine the **DEWPOINT**. The dewpoint is the temperature of which, if the air is cooled to that value, the atmosphere would become saturated (the relative humidity equals 100%). The dewpoint is a measurement of the amount of moisture in the atmosphere.

To calculate the dewpoint from wet bulb/dry bulb temperatures...

1. Turn the 0° value (located on the inner wheel) to the **WET BULB** temperature (labeled as 'Dewpoint' on the outer wheel.)
2. Move the slider to the wet bulb depression value (difference between the dry bulb and wet bulb temperatures) on the proper pressure scale. The pressure scale is the "station" pressure which is the air pressure at your location AND elevation (in inches of Mercury).
3. Read the dewpoint temperature on the outer wheel.

To calculate the dewpoint from dry bulb temperature and humidity...

1. Turn the 100% relative humidity value to the dry bulb temperature (located just above the humidity values).
2. Move the slider to the current relative humidity.
3. Read the dewpoint temperature (located just above the relative humidity scale).

Learn more about the weather in JetStream - An online School for Weather. Jetstream is a free resource for discovering the 'hows' and 'whys' of our weather. There are over 35 lesson plans in JetStream. The lessons begin at www.srh.noaa.gov/jetstream.