Features Analysis Chart—Weather and Seasons

Teacher Name: _____   **Circle One:**   **PRE**   **POST**

Describe the assessment item: Question 1 on the pre-post assessment for the unit on weather and seasons: Draw a picture and add words to describe the **weather pattern in Pomona in September.** Be ready to talk about these questions: **How do you know this? What is your evidence?**

Interview questions: (1) What kinds of weather did you draw? (2) How do you know what the weather is like? (3) Does *[something missing from the drawing]* have anything to do with weather? (4) Is weather always the same or does it change? (4) Is weather the same everywhere?

Describe the ideal response: *The picture should show that the weather in Pomona in September is mostly sunny and warm or hot. The drawing shouldn't include any rain. The interview questions reveal the following responses:* A weather pattern describes what weather is like most of the time. In September, the weather pattern in Pomona is mostly sunny and warm or hot. But the weather pattern changes from month to month. For example, in January, it's mostly cool or warm, and it's rainier than in September. Weather patterns in Pomona change during the day, too. It's usually cooler in the morning and warmer in the afternoon. Weather patterns aren't the same everywhere. For example, Detroit, Michigan, has much colder and snowier weather in January than Pomona does. We know about Pomona's weather because we can feel it and see it. We can measure it too. For example, we can use a thermometer to measure how hot or cold it is in Pomona. We can tell the weather changes over time by looking at our calendars and making graphs that show the weather each day and how it changes. We can see patterns in our graphs, like the pattern that shows it's hotter in September than it is in January.

Features of a Complete, Accurate Response	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1. Picture shows sunny weather.																								
2. Picture shows that the temperature is warm or hot (a thermometer or kids in short sleeves)																								
3. A weather pattern is what the weather is like most of the time.																								
4. Uses the word *pattern* or *weather pattern* in an appropriate way.																								
5. Weather can change from month to month.																								
6. In January, Pomona is cooler and rainier than it is in September.																								
7. Weather can change during the day.																								
8. Pomona's weather is usually cooler in the morning and warmer in the afternoon.																								
9. Weather isn't the same everywhere.																								

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
10. Gives an example of where weather is very different from Pomona at the same time of year (e.g., Detroit, Seattle).																								
11. We can tell the weather by feeling it.																								
12. We can tell the weather by seeing it.																								
13. We can tell the weather by measuring it.																								
14. Temperature is a measure of how hot or cold it is. (Picture shows thermometer.)																								
15. Thermometers are used to measure temperature.																								
16. Graphs or calendars can help us see weather patterns.																								
17. Uses the word *graph* or *calendar* in an appropriate way to connect to weather																								

Features Consistent with Misconceptions/Problems	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1. Picture shows rain or snow (instead of, or in addition to, Sun).																								
2. Picture shows lots of clouds and no Sun.																								
3. A weather pattern is like green, green, blue. (Uses a repeating pattern of temperature colors to define a weather pattern.)																								
4. Weather stays the same all day.																								
5. In Pomona, weather gets colder in the afternoon.																								
6. Weather in Pomona is the same all year long. It's always warm/hot and sunny.																								
7. It always snows in winter (everywhere).																								
8. If it's sunny out, then it's hot.																								
9. If it's cloudy out, then it's cool.																								
10. We know about Pomona's weather because our parents tell us, weather forecasters tell us, or books tell us.																								

RESPeCT
Kindergarten Weather and Seasons Module