

Weather Unit



- 1.1.7 collect and record data using developmentally appropriate instruments and measurements.
- 2.1.13 describe the weather using observations, age appropriate tools.
- 2.1.14 identify weather patterns within one week, one month, and seasonally.
- 1.13 use observations and scientific information when forming predictions.

Montgomery County Public Schools
Rockville, Maryland

Subject: Science
Grade: 1st

Contributor:

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Enduring Understandings:

Weather Changes over time.

Weather can be observed and measured.

Weather affects decisions people make.

Essential Questions:

In what ways does weather change?

How do we measure changes in weather?

*How do weather trends help us make
decisions?*

Differentiated Instruction through Universal Design for Learning Solutions

| Curriculum Unit Methods and Materials | Challenges that these instructional methods and materials present to some students | UDL Solutions <i>And instructional “accommodations” which enable students to succeed without changing the content or conceptual difficulty of the curriculum</i> |
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| Articles on weather: <ul style="list-style-type: none"> • <i>Ask a Weather Watcher</i> • <i>The weather changes</i> • <i>What is Temperature?</i> • <i>What are clouds?</i> • <i>It’s Raining!</i> • <i>It’s Snowing!</i> • <i>When will it snow?</i> | Student cannot see small text. Student cannot decode at grade level. Student cannot comprehend text visually | Etexts are accessibly through text-to-talk programs such as <i>Kurzweil</i> . Allows students to listen and read along with the text at own pace, repeat text, highlight important points or vocabulary. Text can be enlarged as desired. Programs such as <i>ReadPlease</i> allow the student to view and read along with the text in school and at home comfortably. |
| Daily posting of the weather from website on a power point daily schedule slideshow | Student is distractible and misses information. Student has difficult processing verbal information. | The Powerpoint slideshow allows the student to visually see the recorded data for their own records and it will replay for repetition. Providing a capture of the daily weather webpage from <i>weather.com</i> provides an simple data presentation. |
| Excel weather data recording, with weather prediction, and application to life activity | Student has difficulty with organization. Student may not be able to abstract important content. | Student can easily copy and paste the corresponding weather icon rather than typing the type of weather pattern. Student will be able to visually see the weather pattern. Organizes the student’s prediction and allows the student to present his work successfully. |
| Written assessment | Student cannot read questions. Student cannot handwrite legibly. Student cannot outline and organize ideas. Student has difficulty with written language. Student struggles with spelling. | Student will be able to write their answers in paper or pencil or type, use a type-to-talk program, use a word predictor and spelling assistance. |
| Etext worksheets: <ul style="list-style-type: none"> • <i>What will the Weather Be?</i> (pre-assessment) • <i>Read the Weather Chart</i> • <i>Read a Weather Chart</i> • <i>Read a Thermometer</i> | Student cannot see small text. Student cannot decode at grade level. Student cannot comprehend text visually Student has difficulty completing homework. | Etexts are accessibly through text-to-talk programs such as <i>Kurzweil</i> . Allows students to listen and read along with the text at own pace, repeat text, highlight important points or vocabulary. Text can be enlarged as desired. Programs such as <i>ReadPlease</i> allow the student to view, read along with the text, and complete in school and at home comfortably. |

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| <p>PowerPoint slideshow review of the weather unit</p> | <p>Student had difficulty understanding or sequencing tasks. Student has difficulty staying on task. Student is reluctant to ask for help.</p> | <p>This review is a visual and engaging review of weather patterns, characteristics, what to wear, and what kind of play. Students can use this slideshow to easily review the main points of the unit and prepare for summative assessment. Can be used at school and home repetitively.</p> |
| <p>Inspiration Vocabulary Match-up (before reading activity)</p> | <p>Student is distractible and misses information. Student has difficult processing verbal information. Student has difficulty with organization. Student may not be able to abstract important content.</p> | <p>The student will be able to match-up the visual of the vocabulary word by easily point and clicking links from the word to picture. Then they can link the picture to the definition. Can be repeated at home and school. Student can be successful in independent work.</p> |

References

Internet Sites:

- *NewsBank KidsPage*: http://infoweb.newsbank.com/iw-search/we/InfoWeb?p_product=JRKP&p_action=keyword&p_theme=kids&p_nbid=W53M58IPMTE4NjE1Nzk2Mi43NzIyMzQ6MToyOmVz&p_clear_search=&s_search_type=keyword&s_category=none&d_refprod=JRKP
- *NOAA Education – Weather*: <http://www.education.noaa.gov/students.html>
- *Windows to the Universe*: <http://www.windows.ucar.edu/>
- *Weather Wiz Kids*: <http://www.weatherwizkids.com/>
- *The Weather Channel*: <http://www.weather.com/>

Accessible Technology Resources:

Type in descriptions of technology as well as website resources which may provide support to students as part of your unit of study. For example:

Accessible technology:

Kurzweil- www.kurzweiledu.com. allows text to be digitized and read aloud; has built in features for learning and studying, including foreign language dictionaries.

Inspiration- www.inspiration.com

Develops graphic concept maps that can convert to text-based outlines.

Excel- Organizes data

PowerPoint- Visually organizes main points and creatively engages students in reviewing materials

ReadPlease