

**Correlation of *Seeds of Science/Roots of Reading*  
Weather and Water unit to Ohio Science Standards for Grade 4**

<b>Earth Science</b>	
<b>Earth Systems</b>	
1. Explain that air surrounds us, takes up space, moves around us as wind, and may be measured using barometric pressure.	•••
2. Identify how water exists in the air in different forms (e.g., in clouds, fog, rain, snow and hail).	•••
3. Investigate how water changes from one state to another (e.g., freezing, melting, condensation and evaporation).	•••
4. Describe weather by measurable quantities such as temperature, wind direction, wind speed, precipitation and barometric pressure.	•••
5. Record local weather information on a calendar or map and describe changes over a period of time (e.g., barometric pressure, temperature, precipitation symbols and cloud conditions).	•••
6. Trace how weather patterns generally move from west to east in the United States.	•
7. Describe the weather which accompanies cumulus, cumulonimbus, cirrus and stratus clouds.	••
<b>Scientific Inquiry</b>	
<b>Doing Scientific Inquiry</b>	
1. Select the appropriate tools and use relevant safety procedures to measure and record length, weight, volume,	••
2. Analyze a series of events and /or simple daily or seasonal cycles, describe the patterns and infer the next likely occurrence.	•••
3. Develop, design and conduct safe, simple investigations or experiments to answer questions.	••
4. Explain the importance of keeping conditions the same in an experiment.	•••
5. Describe how comparisons may not be fair when some conditions are not kept the same between experiments.	••
6. Formulate instructions and communicate data in a manner that allows others to understand and repeat an investigation or experiment.	•••
<b>Scientific Ways of Knowing</b>	
<b>Nature of Science</b>	
1. Differentiate fact from opinion and explain that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.	••
2. Record the results and data from an investigation and make a reasonable explanation.	•••
3. Explain discrepancies in an investigation using evidence to support findings.	••
<b>Ethical Practices</b>	
4. Explain why keeping records of observations and investigations is important.	••

**Correlation Key:**

- The standard is addressed completely in the unit with explicit instruction and repeated opportunities for practice.
- The standard is addressed partially in the unit with explicit instruction and repeated opportunities for practice.
- The standard is touched upon in the unit providing good reinforcement to other experiences and/or an opportunity for teachers to expand instruction to address the standard partially or completely.