



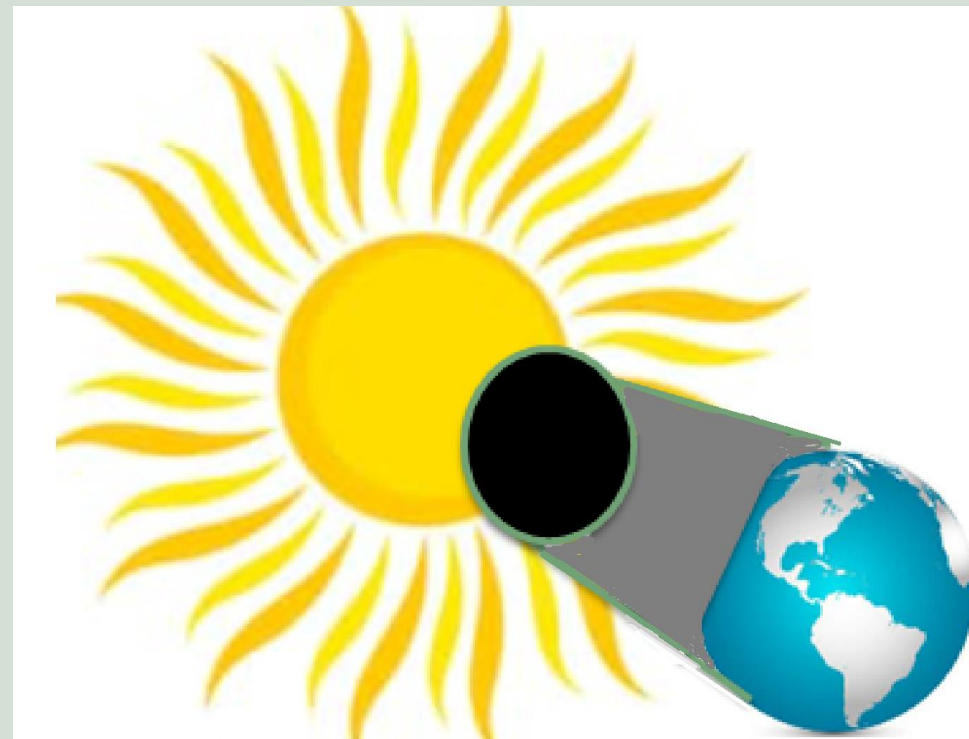

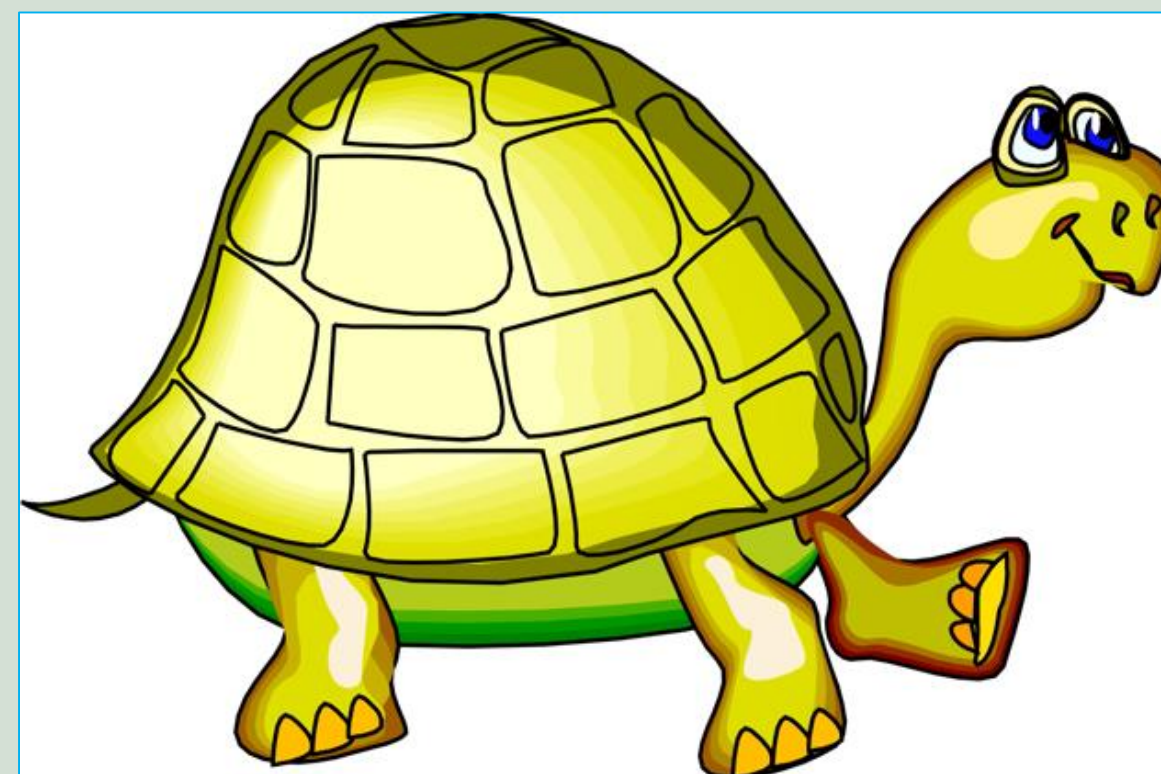
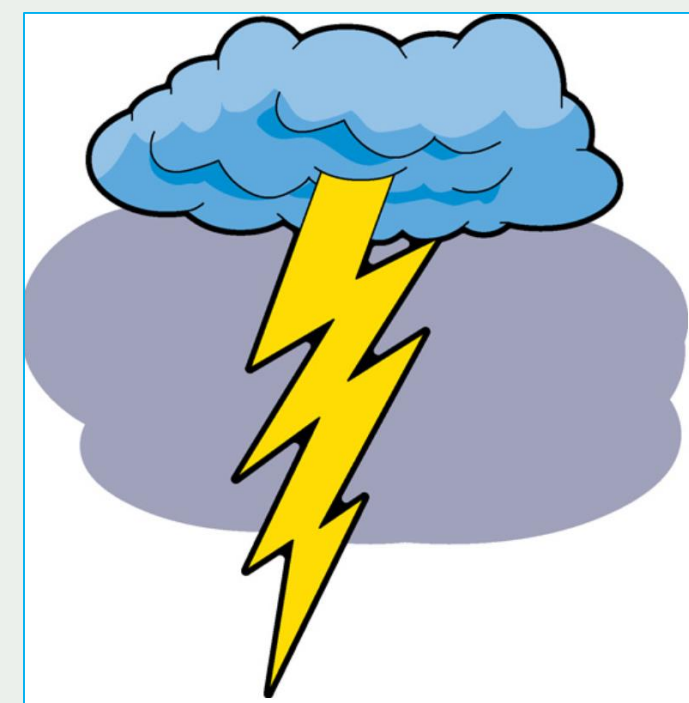
# Meteorological Teaching Tools: Choctaw Weather Legends

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- Storytelling = effective way of teaching.
- Narrated Choctaw legends transmit the cultural and science.
- "...unsurpassed as a tool for learning about ourselves, about the ever-increasing information available to us, and about the thoughts and feelings of others." (ref. 1)
- Stories have been used for millennium as a teaching tool by cultures with oral traditions.

Legend	Science		Explanation
When Parents Ask Children To Be Noisy <i>A black squirrel is nibbling at the sun! Choctaws tell their children to make noise to scare him away and save the sun.</i>	Solar Eclipse		Dangers of a solar eclipse.
How Rabbit Lost His Tail <i>Tired of Rabbit boasting of his long, bushy tail, Fox tricks him into using it to fish in a frozen pond.</i>	Water freezing		Explanation of the three phases of water; moral lesson.
Angry Snapping Turtles Bring Angry Weather <i>Choctaw boy warned not to make the snapping turtle angry, because it could make the weather angry. The boy might get a tornado instead of rain.</i>	Weather Safety		When rain is coming, move to higher ground.
Two Birds give Warning to a Storm <i>Fast moving birds create sparks and a rolling Egg creates thunder to warn the Choctaw of a coming storm</i>	Lightning and Thunder		Lightning and thunder are related. Lightning comes first and they both are early warnings of approaching storms

## Outcomes

- Make the science accessible to students and their families
- Gain the attention of their audience
- "Build stronger schema and memory, making knowledge easier to recover" (ref. 2)
- "Assimilate new ideas and build a path to understanding" (ref. 2)
- "Reduce resistance or anxiety to learning" (ref. 2)
- Stories enliven science and promotes the influence of Native American oral history

## Story telling in enhanced by student hands on activities

- Create a "rabbit" from plastic sheet protectors, and having the students observe and record changes that occur to it when placed in a freezer
- Choreograph a traditional ceremonial dance using flashlights and musical instruments to represent lightening and thunder
- Create a panel for a story blanket based on *How Thunder and Lightning Came to Be*.

## References

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2. *The Purpose of Stories*. (ND). New York University Faculty Teaching and Learning Resources web site <https://www.nyu.edu/faculty/teaching-and-learning-resources/strategies-for-teaching-with-tech/storytelling-teaching-and-learning/the-purpose-of-stories.html> Accessed July 18, 2018)
3. Banister, F., and Ryan, C., (2001). *Developing Science Concepts through Storytelling*. School Science Review. 83 (302). pp.75 – 83
4. Harrell, B. O., and Roth, S.L. (1995). *How Thunder Came to Be*, Dial Books for Young Readers, Penguin. New York. p. 28,
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