

## NGSS Meets the Outdoors: Teaching Elementary Science Outside MSTA 2016

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### Field Assignment: What is the Grand River Watershed like?

Collect evidence to:

- Show how humans are impacting the watershed;
- Show what lives in the watershed;
- Describe the climate we live in;
- Show the effects of weathering/erosion;
- Identify the components of the water cycle.

#### Explore the grounds of the Radisson:

1. Collect evidence (pictures) of our place in the watershed.
  - a. #KBSK12, **Tweet** using Ipads/smartphones
  - b. Draw
2. Ask questions about what you observe (type into Twitter or write down)
  1. Press the quill icon.
  2. Press the camera icon.
  3. Take photo of evidence!
  4. Type question or description
  5. #KBSK12

## Links to helpful resources

Learn more about teacher professional development opportunities at the Kellogg Biological Station: <http://www.kbs.msu.edu/outreach/elementary-teacher-program/>

Resources for NGSS from CREATE for STEM: <http://create4stem.msu.edu/ngss>

Next Generation Science Standards, <http://www.nextgenscience.org/>

**K-ESS3-3.** Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

**1-LS1-1.** Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

**2-ESS2-2.** Develop a model to represent the shapes and kinds of land and bodies of water in an area.

**3-ESS2-2.** Obtain and combine information to describe climates in different regions of the world.

**4-ESS2-1.** Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.

**5-ESS2-1.** Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.

Science and Engineering Practices (Appendices F):

<http://www.nextgenscience.org/sites/default/files/Appendix%20F%20%20Science%20and%20Engineering%20Practices%20in%20the%20NGSS%20-%20FINAL%20060513.pdf>

Water Cycle song by Foster Brown on Naturally: Children's Nature Songs

<http://www.songsforteaching.com/store/foster-brown-c-100.html>