Backyard Exploration Challenge Pages

Using Nature Journals as the platform, these pages can be printed and added to student journals. They help use the journal as a source of data collection on specific areas of investigation and support student skill development in making observations, analyzing data, creating models and applying reasoning.

Challenge Pages consist of graphic organizers paired with a CER for student use and educator evaluation. You can use these to assign journal observations on a specific topic and the use that topic to apply requirements for NGSS. Topics are flexible based on interest of students, teachers, application to curriculum and seasonality.

NGSS Connections

Science and Engineering Practices

- Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena.
- Develop a model to describe phenomena.
- Use a model to test interactions concerning the functioning of a natural system.
- Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to analyzing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).

When Assigning a Challenge make sure to:

- Assign a challenge for your students with enough time to allow them time to collect and record observations.
- Identify clear deadlines for their observations to be made in their journals. Pages do not have to be in sequence.
- Reinforce the consistent use of date, location for recordings in their journals.
- All evidence must come from their journals or notes from presentations.

Example of a Challenge Assignment- Food Web Graphic Organizer

Challenge Examples with CER pages

Bees, Butterflies and Flowers- For potential use in your classroom.

- In Your Nature Journals record your observations of flowers. Find and record 6 different flowers in Your Nature Journal. (Allow a week to collect and record their observations.)
- Share PDF program <u>Backyard Explorations- Bees and Butterflies</u> *
- Provide **How Appealing are Your Flowers** CER page Ask students to refer to their flowers and see what they can claim about their flowers and how they appeal to pollinators.

Worm Study- For potential use in your classroom.

- In Your Nature Journal add this worm study page. Complete the study by _____(set a date) ______.
- Share the <u>Backyard Exploration PDF program Worms and Compost</u>
 *
- Using your worm notes in your Nature Journal see if you can answer this question about worms and the sighting of Jumping Worms. Use CER page Worm appropriate to age group

*Students may want to use their journals to make notes about what they have learned.