Observation Guide for K–5 FOSS Users

Observer _____ **Grade Level** _____ **Date**_____
Teacher _____ **Number of Students** _____

Observation Time: _____ **FOSS Module:** _____

Goals: (if stated)

1. Physical Environment

Is the classroom organized in a way that provides access for all students to engage in the hands-on and sense-making activities?

Code	What to look for
	Science materials station
	Materials accessible to all students
	Desks organized for collaborative groups
	Classroom norms posted on wall
	Class Notebook
	Every student has a notebook and access to a *Science Resources* book
	Science Word Wall (paper or pocket chart)
	Safety and Outdoor Poster on wall
	Set-up for FOSSweb access

2. Establishing a Classroom Culture:

Does the teacher provide the structures and routines that ensure positive collaborative student interactions where all students feel they are part of a community of learners?

Code	What to look for
	Teacher references and uses norms for discourse and collaboration.
	Teacher uses routines for sensemaking discussions and transitions.
	Teacher praises effort and validates emerging ideas and questions.
	Teacher encourages rigor and problem solving.
	Students share their thinking with each other.
	Students respectfully agree/disagree with ideas.
	Students ask questions.

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3. Active Investigation:

You may be observing one or more of these elements in the lesson (context, activity, data management,or analysis). Is the teacher providing opportunities for all students to engage in the science andengineering practices to the fullest extent?

3a. Context

Code	What to look for
	Students think and share what they know about the subject of the lesson. (Activate prior knowledge)
	Teacher asks guiding question, and/or introduces the phenomenon or design challenge.
	Teacher/student poses the focus question.
	Teacher provides or guides the creation of a plan/procedures or students develop their own plan.
	Students ask relevant questions.

3b. Activity

Code	What to look for
	Teacher engage students in one or two scientific and engineering practices purposefully.
	All students share their observations orally and in writing.
	Teacher actively monitors group activity for expected behavior.
	Students use interactive reading strategies to obtain, communicate, and evaluate information in the Science Resources book.
	Teacher checks for understanding.

3c. Data Management

Code	What to look for
	Students write independently in their notebooks (Teacher provide scaffolds as needed.)
	Students record their observations (lists, drawings, diagrams, labeling, etc.)
	Teacher links formal science vocabulary to students' ideas or description of the concept.

3d. Analysis

Code	What to look for
	Teacher facilitates discussions as a member of the learning community.
	Students are writing in class notebook.
	Teacher questions increase in level of complexity using cross-cutting concepts.
	All students are participating in discussion (partner, small group, whole-group)
	Teacher encourages students to connect their ideas with others.
	Students are actively listening to others.
	Teacher ensures equitable participation in paired, small group, and whole-group discussions.
	Students acquire and use new vocabulary words when speaking and writing about disciplinary core ideas.

Notes: _____

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4. Integrating Science Notebooks

Is the teacher supporting students use of science notebooks throughout the investigation?

Code	What to look for
	Teacher and students use a class notebook.
	Students maintain a notebook appropriate for their grade level.
	Teacher provides feedback on student notebooks.
	Students represent their own understanding in their notebooks.

5. Engaging in Science-Centered Language Development

Is the teacher using instructional strategies to support students' ability to speak, read, write and develop language?

Code	What to look for
	Teacher provides support as directed in the sidebar of the Investigations Guide.
	Teacher uses appropriate language scaffolds as needed.
	Students use appropriate strategies when reading articles in Science Resources.
	Teacher supports the development of academic language.

Notes:

6. Sense-Making Discussions for Three-Dimensional Learning

Is the teacher facilitating sense-making discussions? (*Also see Analysis section above.*)

Code	What to look for
	Students are physically arranged to speak and listen to each other.
	Students understand and use the norms for discussion.
	Students speak and listen to each other when analyzing data.
	Teacher asks questions to further student understanding.

Notes:

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7. Using Formative Assessment

Is the teacher using formative assessment techniques to continually check for student understanding throughout the investigation?

Code	What to look for
	Teacher monitors student progress towards the learning goal throughout the lesson.
	Teacher uses assessment opportunity. (response sheet, opportunity. (response sheet, notebook entry, etc.)
	Students share and critique notebook entries (when applicable).
	Teacher uses a next-step strategy to address areas of need.

8. Using FOSSweb and Technology

Is the teacher using technology to engage and assess (grades 3-5) students?

Code	What to look for
	Teacher uses videos and pauses when appropriate to ask questions.
	Teacher uses FOSSweb activities as indicated in the Investigations Guide.
	Students complete I-Checks online.
	Teacher uses virtual investigations and tutorials for specific students based on data.

Notes:

9. Taking FOSS Outdoors

Is the teacher conducting outdoor learning experiences with students?

Code	What to look for
	Teacher provides directions and set expectations for the outdoor experience.
	Students bring science notebooks or other appropriate materials.
	Teacher redirects students as necessary.
	Students discuss data collected outdoors.

Notes:

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