

EARN A STIPEND: Develop inquiry-based lessons or activities about native, non-native or invasive plants



For a stipend of \$150, a lesson must be written so that it is a complete inquiry-based activity, using the template provided below. Be sure to add any additional resources or background information needed for the activity. This includes additional graphics, images, graphs, tables, charts, etc. that might be needed. For more information or to discuss, contact:

NOTE: For more information about native, non-native and invasive plants in Florida, search here: <http://plants.ifas.ufl.edu/guide/>

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Lesson Format Template*

**Adapted from the UF SPICE Program Science Lesson Format: <http://www.spice.centers.ufl.edu/>*

TITLE: Make it catchy and convey the topic of the lesson.

KEY QUESTION(S): Identify key question or questions the lesson will explore.

SUBJECT: Anatomy / Physiology, Biology, Earth/Space Science, Physics, English, Math, etc.

GRADE LEVEL: Specify grade level range.

CONCEPTS: Identify key topics. Try not to be too narrow.

OVERALL TIME ESTIMATE: Indicate total amount of time needed for the lesson.

LEARNING STYLES: Visual, auditory, and or kinesthetic.

VOCABULARY: List key vocabulary terms used and defined in the lesson. All terms should then be defined and indicated in **BOLD** in the "Background Information."

LESSON SUMMARY: Provide a 1-2 sentence summary of WHAT the lesson will cover and HOW this content will be covered (Lab? Discussion? Role play? Simulation? Lecture and demonstration? etc.)

STUDENT LEARNING OBJECTIVES:

The student will be able to...

- 1.
2. etc.

Number the objectives for easy reference. Focus on what students will KNOW, FEEL, or be able to DO at the **conclusion** of the lesson, **not** what they are doing **during** the lesson. Use specific, measurable, observable verbs. Avoid general terms like "know," "understand," or "appreciate." Include at least ONE objective for EACH subject area addressed. Remember that each objective will require at least one specific assessment. Correlate lesson objectives to state or national standards.

MATERIALS: Sort materials and indicate number required for different types of grouping formats (Per class, Per group of 3-4 students, Per pair, Per student). Be as specific as possible. No need to list basic instructional items like paper, pencil, chalkboard, or overhead projector.

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**ESSENTIAL:
SUPPLEMENTAL:**

ADVANCE PREPARATION: Explain what the teacher needs to do to get ready for the lesson, e.g., choose and mark a study site; prepare a solution; prepare a list of local organisms; obtain news clippings regarding an issue; etc.

PROCEDURE AND DISCUSSION QUESTIONS WITH TIME ESTIMATES: This is the “heart” of your lesson plan. Assume you are writing this lesson for a substitute teacher (i.e., someone who may not have any idea what to do unless you clearly explain it to them).

Divide your procedure into numbered steps with time estimates (in minutes) for each step. Be specific. Don't just say “Introduce concept of food webs.” Instead, explain HOW the concept will be introduced. Are you giving a brief lecture? Doing a demonstration? Asking a series of whole-class questions? Showing a film clip?

- Middle school lessons are generally 40-90 minutes (regular or block schedule)
- High school lessons are usually 50-100 minutes (regular or block schedule).
- Elementary lessons can be as brief as 30 minutes.

When including discussion questions in a lesson plan, list specific questions to ask and provide sample acceptable answers in parentheses. Instead of...“Conduct a discussion of the impact of global warming.” ... list exactly what questions the teacher should ask.

BACKGROUND INFORMATION: Provide accurate, up-to-date information from reliable sources to give teachers/students sufficient background information to succeed with this lesson/activity. Define all key vocabulary. This is usually a minimum of 3 paragraphs and maximum of 2 pages, double-spaced.

ASSESSMENT SUGGESTIONS: Describe specific assessments for EACH objective:

For objective 1...
For objective 2... etc.

Don't just say “Collect student worksheet “ or “Give an oral quiz.” Need to clearly indicate the exact question or task that will be used to assess each objective.

EXTENSIONS:

ACTIVITIES: Are there other activities you know of from other resources that relate to this lesson?

LITERATURE: Are there trade books, novels, journal articles, or other print materials that focus on the same topic(s) as this lesson?

RESOURCES/REFERENCES: List all print and/or web-based references/resources used for either lesson ideas of content background information. Provide complete citations for all references.

SUNSHINE STATE STANDARDS:

<http://plants.ifas.ufl.edu/education>