

Appendix A 4Ex2 Instructional Planning Tool: Detailed Organizer

Title of lesson:

Standard:

Objective: observable and measurable

Summative assessment: aligned with objective

Engage: prior knowledge, uncovering student misconceptions, developing a scientific question that can be tested, sparking student interest in a topic

Formative assessments: pre-test, brainstorming, teacher observation, science journals, formative assessments discussed/modeled in class

Explore: giving students the opportunity to explore a concept in science; test a question; experiment

Formative assessments: teacher observation, think-pair-share, science journal, other formative assessment

Explain: helping students make sense of their exploration; guiding them to the main objectives of the lesson; helping connect the exploration to the main ideas of the lesson

Formative assessments: whole-class discussion, small-group discussion, presentations, teacher observation, science journal, rubric

Extend: connecting the main ideas of the lesson to a real-world situation or a different context

Formative assessments: teacher observation, checklist, science journal, rubric, small-group or whole-class discussion

Appendix A 4Ex2 Instructional Planning Tool: Blank Organizer

Title of lesson:

Standard:

Objective:

Summative assessment:

Engage:

Formative assessments:

Explore:

Formative assessments:

Explain:

Formative assessments:

Extend:

Formative assessments:

Appendix A 4Ex2 Instructional Planning Tool: Lesson Template

Title:

Lesson overview:

Standard:

Objective:

Materials:

Procedure:

Engage:

Explore:

Explain:

Extend:

Assessment:

Formative assessments *throughout* the lesson:

Summative assessment to *measure* the lesson objective: