Main Concept addressed in lesson: What is the primary science concept this lesson will teach?

Relationship to your Big Ideas/Enduring Understandings: How does this lesson contribute to students’ understanding of at least one of the Big Ideas you identified for your unit in the unit overview?

Key Science Topic(s): List the related topics students will need to know/understand/have been introduced to in order to understand the Main Concept; if this list starts to get too long, consider whether the lesson is too complex.

Key Process Skills Used or Learned During Lesson: What process skills will students use to learn the concepts addressed in the lesson? What process skills will students be developing during this lesson?

Student Background including Potential Misconceptions: What experiences might students have had related to the lesson concepts/topics? What background information, including potential misconceptions might students have as related to the topic?

Grade Level(s) appropriate for this lesson:

Time Required (including Teacher Preparation): If you have not taught the lesson, anticipate the time the lesson might take. Include any directions the teacher might need in order to prepare for the lesson.

Materials (include quantities per number of students or groups)

Safety Considerations: Anticipate any potential safety concerns and describe both proactive and reactive steps the teacher should take in order to reduce the risks and respond accordingly.

Intended Learning Outcomes/Objectives: ILOs or Objectives should 1. Be observable or measurable; 2. Clearly state the expectations you have for your students; 3. Describe what students should know (concepts) and be able to do (process) by the end of the lesson; 4. Relate directly to the activities of the lesson, but should NOT include activities – ILOs or Objectives are the end goal, whereas activities are means to achieving or reaching the goal

Student Assessment: Assessment should be appropriately defined for each of the objectives; Each objective should be assessed, whether formally or informally; Clearly describe the assessment strategy/tool/procedure that you will use to assess each ILO/Objective

Activities/Procedures
Use of learning cycle in planning should be evident; Lesson should be described principally in terms of what the students’ are doing in the lesson; Anticipated teacher questions and student responses must be evident THROUGHOUT THE LESSON PLAN; Including anticipated student responses will help in planning.

FOCUS – Introduces the lesson; Explores and asks for clarifications of the ideas that children already have about the topic; Assesses students’ prior knowledge about the topic of the lesson
Transition: Provides a reason to explore, participate in the lesson; Challenges the students’ current ideas in way that requires them to learn more about the topic.

EXPLORE – Actively engages students in direct, meaningful activities/explorations of the science concept(s) being investigated: Description of the activities of the lesson includes sufficient detail for a reader to follow the flow of the lesson; Activities should address specified objectives and should therefore be relevant to the content of the lesson; Students work in groups when appropriate

REFLECT – Students discuss and share ideas based on their observations; Connections between the concept and the activities/experiences are established; Students begin to reconcile the new information they are learning with their earlier held ideas; Teacher presents accurate and relevant content information as necessary to promote understanding

APPLY – Students apply and extend the learned concept to novel situations and/or demonstrates the relevance of the concept to students’ lives

Lesson Closure: Includes a plan for summarizing what was learned during the lesson. Closure to a lesson allows the teacher to check for understanding, and/or set the stage for the next lesson.

Explanation of Concept: An accurate explanation of the concept for the teacher (this can come from your unit overview but should be included here as directly relevant to this lesson). The explanation may be incorporated in whole or in part into the lesson when appropriate, but will likely include information for the teacher’s level of understanding that would not be introduced to the students.

Resources/References: Any resources or references used in the planning of the inquiry lesson, including references used for the teacher’s learning of the content should be properly cited using APA format

Lesson Assessment: This section cannot be completed until after the lesson has been taught. This section encourages the teacher to reflect on the strengths of the lessons and the areas for improvement. Reflecting on a lesson after it is taught and recording some notes for teaching the lesson in the future is a good habit to establish for any lesson.