**Sea Grant GA Teaching Science as Inquiry (TSI) Lesson Plan**

Name:

Activity Name:

1. Describe your activity:
2. Why did you choose to do this activity?
3. What are your teaching goals?
4. How does this activity tie into your teaching goals?

Describe how you will connect this activity to your research.

1. How does this activity align to the topics in the *Exploring Our Fluid Earth* Curriculum?
2. When and where do you plan to teach this activity?

Describe the overall setting of your activity, including how many students you anticipate and how long the activity will take (per student as well as your overall time if the activity will be taught at an event like SOEST Open House)

1. Describe how this activity relates to at least one of the TSI Themes.

Themes: Community, Metacognition, Science as a Human Endeavor, Observations and Inference, Modeling Science, Scientific Language, Connections

**Ocean**

1. Describe how you will connect this activity to the ocean:
2. Select the Ocean Literacy Principle(s) that you anticipate this activity will address. (check all that apply)

□ 1. The Earth has one big ocean with many features.

□ 2. The ocean and life in the ocean shape the features of the Earth.

□ 3. The ocean is a major influence on weather and climate.

□ 4. The ocean makes earth habitable

□ 5. The ocean supports a great diversity of life and ecosystems.

□ 6. The ocean and humans are inextricably interconnected

□ 7. The ocean is largely unexplored

**Preparation**

1. Explain any instructional struggles that you foresee and how you will address them.

e.g., misconceptions, discussions, aspects most difficult for students to grasp, etc.

1. What ***TSI inquiry questioning strategies*** will you use to help your students meet your learning goals?

What types of questioning or approaches to discussion will you take to support student engagement and learning? See questioning handout for suggestions under “TSI Pedagogy” in binder.

1. What ***TSI practices of inquiry teaching strategies*** will you focus on implementing to help your students meet your learning goals?

See “TSI Practices of Inquiry Teaching” handout for suggestions uder “TSI Pedagogy” in binder.

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| Use the table on the next page (p. 4) to plan your lesson using TSI.  For each phase:   * **Teacher:** Describe what you will be doing * **Student:** Describe what students will be doing * **Assess:** Describe how you will assess students in this phase so you can monitor their progress through the activity |

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| --- | --- | --- | --- |
| **INTERPRETATION** | | **INITIATION** | |
| Teacher |  | Teacher |  |
| Student |  | Student |  |
| Assess |  | Assess |  |
| **INSTRUCTION** | | | |
| Teacher |  | | |
| Student |  | | |
| Assess |  | | |
| **INVESTIGATION** | | **INVENTION** | |
| Teacher |  | Teacher |  |
| Student |  | Student |  |
| Assess |  | Assess |  |

1. Briefly describe how you will guide students through the TSI Phases of Inquiry.

(You are the research director of your lesson, and thus guide or facilitate the learning in the classroom, even if an activity is very student-directed).

1. What *overarching* TSI mode(s) will you focus on for this activity? Why?

Modes: Curiosity, Description, Authoritative knowledge, Experimentation, Product evaluation, Technology, Replication, Induction, Deduction, Transitive knowledge

1. Please provide any additional comments that will help you prepare to teach this activity or help the TSI facilitators understand how you plan to teach this activity.