Socratic Seminar Student guided discussion

Directions: The teacher will assign each group a number topic that they will lead a class discussion, they will be responsible for guiding the group to the correct answer.

Grading for this activity

Part 1: Leading the discussion (70%)

- Presenting your question
- Calling on students to answer and guiding the answers to the correct end result
- Facilitating the discussion
- Recording the answers on the board

Part 2: Participating in the discussion (30%)

- Actively participating in the discussion (Only talking when called upon)
- Adding to discussion not repeating (expanding on an answer not saying I agree with the answer)
- Everyone is required to add to the discussion/ Points taken away for off task behavior

Topics

1. Review of the Formal lab write up: Take a Class Survey
    a. What were the phenotypes that were tested in this experiment?
    b. Using the "Sample data" How would you answer analysis question number 1? Give specific examples
    c. Using the "Sample data" How would you answer analysis question number 2? Give specific examples
    d. Just using this data would we be able to predict what traits our children would have/ Why or why not? If no what would need to be provided to us?
2. Probability and Punnett Squares
    a. Define probability
    b. How are Punnett squares used to show this?
    c. How would we define the following
        i. Phenotype, Genotype, recessive and dominant
        ii. Give examples from this unit for each
3. Alien project with definitions
    a. How do traits and heredity apply to the Alien activity we did in class?
    b. Give an example of how your Alien showed inherited traits.
    c. Could your alien's offspring have traits present that were not present in the parents?
        i. Ex: Can a child have blue eyes if both parents have brown eyes?
        ii. If the mother alien has a tail which is a recessive trait and has offspring with an alien without a tail, what would their children have? Explain why.

4. Ecology discussion
    a. What is Ecology?
    b. What is the difference between Biotic and Abiotic factors?
        i. Give examples
    c. What is the difference between a Niche and Habitat?
        i. Give examples of Niches
        ii. Give examples of Habitats
    d. What is the Ecological organization? List all levels.
        i. Give me an example of the Ecological organization you would find on the Grand Mesa?
        ii. How would the Ecological organization change if it were in the Amazon?
    e. Why is dumping paint down the sewer is drains harmful to the ecosystem? How are biotic and abiotic factors affected?
        i. Long term affects
        ii. Short term affects