

Handout B.2

Activity #3: On the Hunt for K-12 Environmental Literacy

1. According to the *K-12 Environmental Education: Guidelines for Excellence (K-12 Guidelines)*, what is the **mission** of the North American Association for Environmental Education (NAAEE)? _____
2. According to the *K-12 Guidelines*, “an **environmentally literate** person is someone who... _____”.
3. What are the **Sustainable Development Goals (SDGs)**?

4. Which of the following is **NOT** one of the **key beliefs** that ground, or underpin, environmental education? _____
 - A) If individuals learn how to make informed decisions, they will do so.
 - B) Humans can live compatibly with nature and act equitably toward each other.
 - C) Environmental education is best taught in the K-12 classroom.
 - D) People can make informed decisions that consider future generations and reflect changing circumstances.
5. Page 13 suggests 8 essential **Underpinnings of Environmental Education**. Which of these key principles do you feel is the most essential, and why?

6. According to the concept of *Systems Thinking* (Cabrera & Cabrera, 2015), there are **four cognitive skills**, or simple rules, that underlie even the most complex forms of thinking: Distinctions (D); Systems (S); Relationships (R); and Perspectives (P). Match the skills with their definitions below (a – d). Write the definition in the space provided on the Chart below:
 - a. Any idea can be the point of the view of a perspective
 - b. Any idea can be split into parts or lumped into a whole
 - c. Any idea can be distinguished from other ideas
 - d. Any idea can relate to other ideas

| Cognitive Skill/Rule | Definition |
|------------------------|------------|
| Distinctions Rule (D) | |
| Systems Rule (S) | |
| Relationships Rule (R) | |
| Perspectives Rule (P) | |

7. (True or False) *Systems thinking* is a cross-disciplinary approach to building knowledge about real-world systems and real-world problems, but it is only relevant to students with advanced metacognition, and therefore is recommended only for grades 6 and above. _____
8. Several *general principles* help guide environmental instruction. Fill in the blanks for the following sentences:
- A) The learner is an _____ participant, therefore, instruction should be guided by the learner's interests.
 - B) All learners can enhance their capacity for _____ and effective, responsible action.
 - C) Because environmental issues can prompt deep feelings and strong opinions, educators must take an _____ approach to instructions.
 - D) Environmental literacy depends upon a personal commitment to _____ skills and knowledge. Instructors should foster curiosity by providing early and continuing opportunities to explore their community and environment.
9. Many of the Strands are illustrated by ***Guidelines in Practice***. To expand teacher's classroom materials, there are also segments titled ***Resources You Can Use***. What is the primary source of the activities suggested in the ***PLT Green Schools*** resource on page 16? _____
10. The ***K-12 Guidelines*** are organized into **4 Strands**, each of which represents a broad aspect of environmental literacy. While together the framework creates a vision of environmental literacy, it is important to remember that the process of becoming environmentally literate is non-linear, and the sequence of the guidelines is a tool to bring order and logic to the document rather than establishing a hierarchy of skills and knowledge. Fill in the complete title of each strand.
- A) Strand 1: _____
 - B) Strand 2: _____
 - C) Strand 3: _____
 - D) Strand 4: _____
11. Each strand is further defined by a set of guidelines that articulate knowledge and skill benchmarks to evaluate student success at the end of three grade levels. What are the *grade levels and approximate ages* of students for which they are targeted? _____;
 _____; and _____.

12. What is the name of the NAAEE platform for professional development, resources, learning opportunities, and much more! _____
13. In Grades K – 4, Strand 2, Guideline A, the second performance indicator (2nd bullet) ask students to compare the differences between _____ and _____.
14. The *guidelines* for Grades 5 – 8, beginning on page 42, further illustrate how teachers can integrate cross disciplinary concepts into environmental education. On page 54, **Guidelines in Practice**, under the Murdock Elementary School in Willows, CA, the teacher incorporates an engineering (STEM activity) by having the students redesign _____.
15. The *guidelines* for Grades 9 – 12, beginning on page 65, provide numerous examples of how high school teachers can incorporate scientific investigation and civic responsibility into their curriculum through environmental issues. On page 80, Strand 3, Guideline A, Performance Indicator 4, encourages the use of print and digital sources to seek information on _____ and _____ influences as well as indigenous and traditional knowledge sources.
16. Use the **K-12 Guidelines** to identify the resource that is used as an example for Grades 9 – 12 that takes a “Systems Approach”. _____
17. Where can you find free downloadable pdfs (and hard copies available for purchase) for all six of the **Guidelines for Excellence** publications?

18. Using the **K-12 Guidelines** for Grades K-4 and the **Guidelines in Practice** example on page 24, give two examples from the reading to illustrate how elements of Strand 1 were exemplified.

19. Using the **K-12 Guidelines** for Grades K – 4 and the **Guidelines in Practice** example on page 37 & 38 (Wolverine Park, Anchorage: Students Serving Community), identify *at least two* actions that the students engaged in that relate to Strand 3. Clearly articulate the sub-category (either 3.1 or 3.2), the guideline (A, B, C, or D), and the performance indicator (bullet point) in your response.

20. Using the **K-12 Guidelines** for Grades 5 – 8 and the **Guidelines in Practice** segment Murdock Elementary School in Willows, CA on Page 54, provide *at*

least two examples illustrating how the fifth graders efforts align with Strand 2.

21. After responding to the previous question, site *at least two* other ways where the Murdock Elementary School example aligns with other strands (Strands 1, 3, or 4.) _____

22. Using the ***K-12 Guidelines*** for Grades 9 – 12, Strand 2.2 (pages 74 & 75) and the ***Guidelines in Practice*** (National Park with Local Connections– page 76), describe *at least two* ways that educator Kat Robbins integrates the school's interdisciplinary curriculum with important performance indicators.
