

Critical Thinking Activities for the 12 Principles of Plant Biology & Book Marks

ASPB offers the 12 Principles of Plant Biology and 12 full-color bookmarks to represent each principle.

<http://www.aspb.org>

1. Categorize words or phrases from each bookmark under the headings 'Science Use' or 'Daily Use.' Brainstorm definitions for unfamiliar terms. Stage a 'dictionary race' to look up or verify them. Publish an illustrated glossary of plant science terms.
2. Organize the bookmarks by the main idea presented in each one. Create categories or try these: life processes, environmental needs, plant material uses.
3. Summarize the key information on a bookmark (or category of bookmarks) into a concise statement. Use the statement as a theme or opening line to a fictional story or poem.
4. Create a game or graphic display (poster, t-shirt, web page) to highlight the information on 2-3 bookmarks. Use bookmarks that portray coordinated or contrasting themes.
5. Check out ASPB's journals: www.plantcell.org/ or www.plantphysiol.org/. Find a research paper on one of the topics mentioned in the principles. Summarize its abstract. Hint: The first six *Teaching Tools* www.plantcell.org/teachingtools offer a good place to start for user-friendly overviews of research-based content.
6. Transform a bookmark into a multi-media presentation or oral report. Research for 5-8 more related facts. Add a visual or prop. Record reports and gather (or create a photo archive of) props to create a multi-sensory classroom museum or social media page.
7. Use the information on a bookmark to write a testable question. Write at least one accompanying hypothesis. List all the resources needed to answer the question and/or test the hypothesis.
8. Identify a plant scientist whose work reflects at least one of the 12 principles. Summarize the scientist's training and research. List 3 questions you would ask that scientist.
9. Great a catalog of items created with plants. Array images of each plant-based food, fiber, fuel, or medicine. Add catchy blurbs on how each product develops or is derived from plants. The goal is to 'sell' how vital plants are for healthy, comfortable, sustainable, and fun daily living.
10. Find & read a book about plant science. Hold your place with your favorite bookmark!

Questions or comments? info@aspb.org