



Observation Exercises for Everyone

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~ A Walk with Leonardo – Part A ~

Purpose:

- Training one's eyes to really 'see' and not just glimpse at a subject
- Describe observations by making accurate visual representations of found objects and by adding descriptive field notes
- Share discoveries with classmates and discuss ideas and thoughts about what they find

Additional lessons connecting teaching standards:

- Observe patterns in nature, alternating and repeating, simple and complex. Manmade objects are also useful in this activity, if nature is in short supply in the immediate area.
- Introduce the topic of *geometric* patterns that pervade the natural world (i.e., the spiral) and their significance: Nature wastes nothing. Leonardo noticed these patterns. Another example: The filaments within the wings of a dragonfly are rectangular along the edges and pentagonal in the centers. To the unobservant eye, those shapes go unnoticed. However, if one finds a dragonfly that has fallen upon a sidewalk as its brief life ends, those shapes are easy to find.
- Draw and make field notes describing the variation in the structures your students find in nature (e.g., variation in leaves, in tree bark, tree branching patterns, variation in shape and size between different insects or birds), or even with available manmade objects.
- Draw and make field notes describing differences in color, form, shape, pattern, and texture.

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For outside the classroom:

Materials:

1. One pencil, an eraser, a pen each per student
2. A field notebook (small sketchbook, journal, or notebook) for each

Method:

1. Students then leave the classroom and go outside. Each student is free to wander around school grounds.
2. Direct students to move slowly and begin to notice subjects they may have looked at for days, weeks, even years. Now have them observe these in a different way. Examples could include tree bark, branches, roots, leaves, ponds, and fountains.
3. Instruct them to make rough sketches of what they see.
4. Describe objects and scenes by way of notations, thoughts, and questions.
5. Time allotted for this activity is at least one-half hour.

Additional Suggestions:

Depending upon the age level of your students, additional preliminary activities may be needed. For example, in the case of younger students, consider taking the class outside and gather around a tree. This could be a tree they've been walking by for a long time, but have probably not noticed many of its details. Ask them to look upwards and take note of its leaves and branching patterns. By looking closely at the trunk, have them notice the bark. Does the bark host any other growth, such as moss or lichen? Direct them to take note of its root configurations.

The next day, before they enter the building, they should look at the tree again and find one new "secret" that the tree holds.

~ A Walk with Leonardo – Part B ~

Returning to the classroom:

Method:

1. Students return as a group to the classroom after the allotted time.
2. Split the class into small groups of 4 or 5 each to share observations, journal entries.
3. Instruct students to write a brief reflection of the activity. Ask a few students to share their entries and thoughts about them with their group.

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4. Hand out to each student a copy of at least one page from Leonardo da Vinci's notebooks. Make sure this page contains sketches Leonardo made from nature: plants, insects, etc. This will be useful as the next step for the homework assignment.



~ A Walk with Leonardo – Part C ~

Homework:

Method:

1. Each student will compare/contrast his/her field notebook entries with Leonardo's style of observing and recording observations.
2. They must record those similarities and differences in their field notebooks, ask further questions, pose other ideas and thoughts on recording their own "data from the field."

Questions:

1. Name one example of an aspect of nature that you did not notice before.
2. How might this type of activity create a more keen awareness of other aspects of the world?

