



Plant Science Merit Badge Workbook

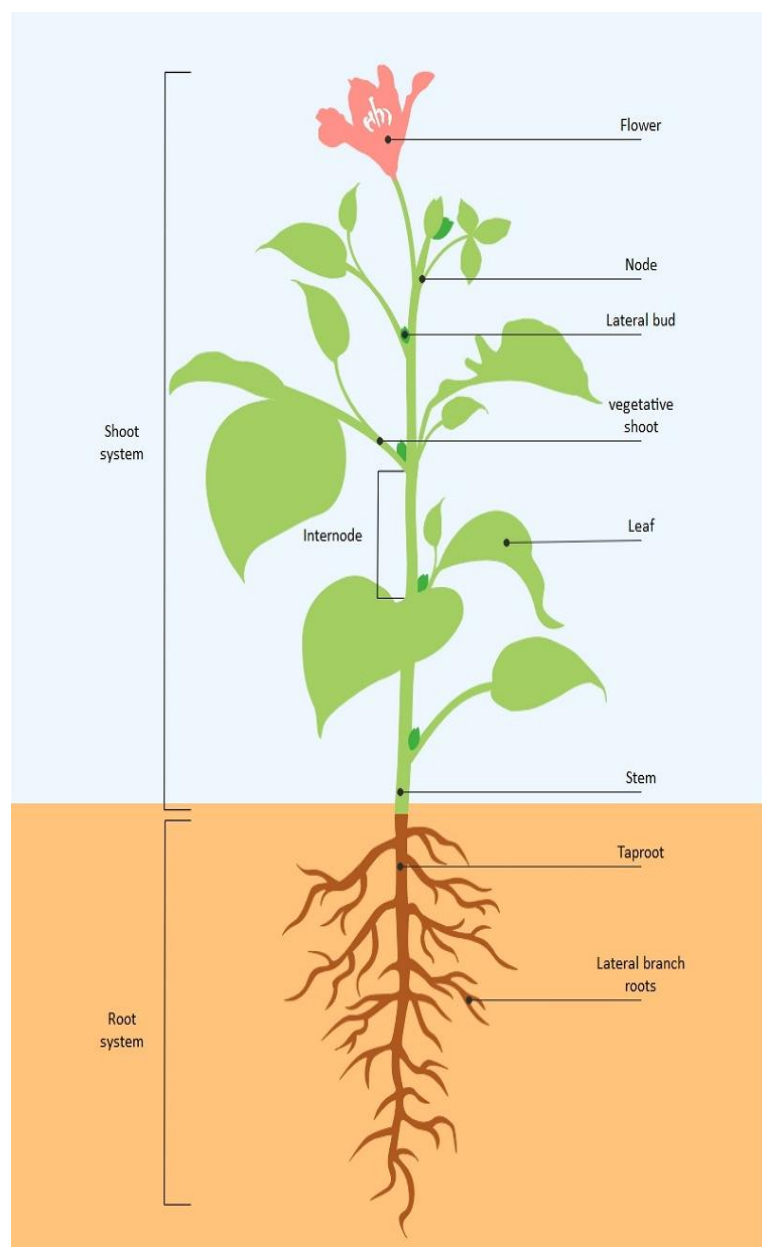
SCOUTMASTER BUCKY

Scouts participating in a Scoutmaster Bucky merit badge opportunity, whether online or in person, should consider using the Plant Science merit badge pamphlet for discovery and knowledge, along with the class preparation pages for clarifications, insights, and expectations.

<https://scoutmasterbucky.com/merit-badges/plant-science/plant-science-pamphlet.pdf>

<https://scoutmasterbucky.com/merit-badges/plant-science/plant-science-cpp.pdf>

REQUIREMENT 1: Make a drawing and identify five or more parts of a flowering plant. Tell what each part does.





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REQUIREMENT 2: Explain photosynthesis.

Notes:

REQUIREMENT 2: Tell why photosynthesis is important.

Notes:



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REQUIREMENT 2: Tell at least five ways that humans depend on plants.

Way #1:

Way #2:

Way #3:

Way #4:

Way #5:



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REQUIREMENT 3:

Explain how honeybees and other pollinating insects are important to plant life.

Notes:

REQUIREMENT 4:

Explain how water affects plants.

Notes:



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REQUIREMENT 4: Explain how light affects plants.

Notes:

REQUIREMENT 4: Explain how air affects plants.

Notes:



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REQUIREMENT 4: Explain how temperature affects plants.

Notes:

REQUIREMENT 4: Explain how pests affect plants.

Notes:



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REQUIREMENT 4: Describe the nature and function of soil.

Notes:

REQUIREMENT 4: Explain the importance of soil.

Notes:



REQUIREMENT 4: Tell about the texture of fertile soil.

Notes:

REQUIREMENT 4: Tell about the structure of fertile soil.

Notes:



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REQUIREMENT 4: Tell about the composition of fertile soil.

Notes:

REQUIREMENT 4: Tell how soil may be improved.

Notes:



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REQUIREMENT 5: Tell how to propagate plants by seeds.

Notes:

REQUIREMENT 5: Tell how to propagate plants by roots.

Notes:



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REQUIREMENT 5: Tell how to propagate plants by cuttings.

Notes:

REQUIREMENT 5: Tell how to propagate plants by tubers.

Notes:



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REQUIREMENT 5: Tell how to propagate plants by grafting.

Notes:

REQUIREMENT 5: Grow a plant by ONE of these methods (seeds, roots, cuttings, tubers, or grafting).

Be sure to bring proof of your plant project to share your work with your counselor

This requirement must be reviewed with your merit badge counselor.

BE PREPARED!

Notes:



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REQUIREMENT 6:	List by common name at least 10 native plants that grow near your home.
NATIVE PLANT #1:	
Common Name:	
NATIVE PLANT #2:	
Common Name:	
NATIVE PLANT #3:	
Common Name:	
NATIVE PLANT #4:	
Common Name:	
NATIVE PLANT #5:	
Common Name:	
NATIVE PLANT #6:	
Common Name:	
NATIVE PLANT #7:	
Common Name:	
NATIVE PLANT #8:	
Common Name:	
NATIVE PLANT #9:	
Common Name:	
NATIVE PLANT #10:	
Common Name:	



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REQUIREMENT 6:	List by common name at least 10 cultivated plants that grow near your home.
CULTIVATED PLANT #1:	
Common Name:	
CULTIVATED PLANT #2:	
Common Name:	
CULTIVATED PLANT #3:	
Common Name:	
CULTIVATED PLANT #4:	
Common Name:	
CULTIVATED PLANT #5:	
Common Name:	
CULTIVATED PLANT #6:	
Common Name:	
CULTIVATED PLANT #7:	
Common Name:	
CULTIVATED PLANT #8:	
Common Name:	
CULTIVATED PLANT #9:	
Common Name:	
CULTIVATED PLANT #10:	
Common Name:	



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REQUIREMENT 6: List five invasive non-native plants in your area and tell how they may be harmful.

INVASIVE NON-NATIVE PLANT #1:

Name:

How they may be harmful:

INVASIVE NON-NATIVE PLANT #2:

Name:

How they may be harmful:

INVASIVE NON-NATIVE PLANT #3:

Name:

How they may be harmful:



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INVASIVE NON-NATIVE PLANT #4:

Name:

How they may be harmful:

INVASIVE NON-NATIVE PLANT #5:

Name:

How they may be harmful:

REQUIREMENT 6: Tell how the spread of invasive plants may be avoided.

Notes:



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REQUIREMENT 6: Tell how the spread of invasive plants may be controlled in ways that are not damaging to humans.

Notes:

REQUIREMENT 6: Tell how the spread of invasive plants may be controlled in ways that are not damaging to wildlife.

Notes:

REQUIREMENT 6: Tell how the spread of invasive plants may be controlled in ways that are not damaging to the environment.

Notes:



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REQUIREMENT 7: Name and tell about careers in agronomy.

Notes:

REQUIREMENT 7: Name and tell about careers in horticulture.

Notes:

REQUIREMENT 7: Name and tell about careers in botany.

Notes:



REQUIREMENT 7: Write a paragraph about a career in one of these fields that interests you.

Selected Field:

Notes:



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COMPLETE ONE OF THE FOLLOWING OPTIONS FOR REQUIREMENT 8

PLEASE NOTE THAT EACH OPTION FOR REQUIREMENT 8 IN THE PLANT SCIENCE MERIT BADGE IS A SEPARATE SUPPLEMENTAL WORKBOOK SECTION

Choose the option you want to do for completing Requirement 8 and download that section for inclusion with the main section of the Scoutmaster Bucky Plant Science Merit Badge Workbook.

[AGRONOMY OPTION](#)

[HORTICULTURE OPTION](#)

[FIELD BOTANY OPTION](#)

