



# Middle School Plant Science (MAG2111B)

## NDCDE User Guide

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Welcome: Start Here!

## Welcome to Middle School Plant Science I

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Welcome to Plant Science I

Propagating Plants Project -- START AT THE BEGINNING OF THE CLASS!

Propagating Plants from Cuttings

Dr. Ken Mudge on cutting propagation

## Unit 1 ... Origin and Development of Cultivated Plants

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Discussion Forum

Unit 1 Concepts and Terms

Origin and Development of Cultivated Plants E-Chapter

CS301 Origin and Development of Cultivated Plants

Ancient Fertile Crescent Almost Gone, Satellite Images Show

Plant Domestication

History of Plant Cell, Tissue and Organ Cultures

Unit 1 Vocabulary Quiz

Unit 1 Quiz

## Unit 2 ... Geographical Distribution of Plants

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Unit 2 Concepts and Terms

Geographical Distribution of Plants E-Chapter

CS302 Geographical Distribution of Plants

What are the plants like where you live? (and others!)

Plant Hardiness Zone

The Five Major Biomes

Unit 2 Vocabulary Quiz

Unit 2 Quiz

## Unit 3 ... Classifying and Naming Plants or Plant Taxonomy

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Unit 3 Concepts and Terms

Plant Taxonomy E-Chapter

CS303 Classifying and Naming Plants or Plant Taxonomy

Understanding Scientific Names

Introduction to Taxonomy

Taxonomic Classification

Unit 3 Vocabulary Quiz

Unit 3 Quiz

## Unit 4 ... Plant Structure

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Unit 4 Concepts and Terms

Structure of Plants E-Chapter  
Structure of Plants PPT  
Plant Structure Video  
Plant Morphological Features  
Flower Identification Quiz  
Leaf Identification Quiz  
Plant Diagrams and Glossary  
Flower Parts  
What Are the Parts of a Flower? Try it!  
Unit 4 Vocabulary Quiz  
Unit 4 Quiz

## Unit 5 .... Anatomy of Plants

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Unit 5 Concepts and Terms  
Anatomy of Plants E-Chapter  
Anatomy of Plants PPT  
Plant Cell Interactive  
The Busy Leaf -- Photosynthesis  
Plant Communities Glossary  
Botany Glossary  
Plant Anatomy Video  
Plant Anatomy p1  
Plant Anatomy p2  
Unit 5 Vocabulary Quiz  
Unit 5 Quiz

## Unit 6 ... Properties of Soil

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Unit 6 Concepts and Terms  
Properties of Soil E-Chapter  
Properties of Soil PPT  
Soil Horizons Video  
Hidden Horizons Interactive Activity  
Soil Orders  
Soil Orders Interactive  
State Soils Interactive  
Texturing soil by feel video -- No Sound  
Guide to Texture by Feel  
Unit 6 Vocabulary Quiz  
Unit 6 Quiz

## Unit 7 ... Role of Water in Plants

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Unit 7 Concepts and Terms  
Role of Water in Plants E-Chapter  
Unit 7 Vocabulary Quiz  
Soil and Water Retention  
NOAA Soil Moisture  
Plants and Water  
Transportation in Plants  
Unit 7 Quiz

## Mid-Term Exam

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Mid-Term Exam

## Unit 8 ... Plant Nutrients and Their Roles

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Unit 8 Concepts and Terms  
Essential Nutrients and Their Roles E-Chapter  
Essential Nutrients and Their Roles PPT  
Guide to Symptoms of Plant Nutrient Deficiencies  
The range of organisms that can fix nitrogen  
Physiology and anatomy of nitrogen fixation  
Ecology of nitrogen fixation  
Plant Nutrition and Transport  
Fertilizers: Soil-Plant-Nutrient Relationships  
Unit 8 Vocabulary Quiz  
Unit 8 Quiz

## Unit 9 ... Effect of Temperature on Plants

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Unit 9 Concepts and Terms  
Effect of Temperature on Plants E-Chapter  
Degree Days  
Degree Days Regions  
Calculating Degree Days  
Normal Temperature, Precipitation and Degree Days  
Warming Temperatures Have Plants Moving North  
Effect of High Temperatures on Small Grain Development and Yield  
Unit 9 Vocabulary Quiz  
Unit 9 Quiz

## Unit 10 ... Light and Plants

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Unit 10 Concepts and Terms  
Light and Plants E-Chapter  
Photoperiodism  
Scientific Basis For Autumn  
The Effect of Light on Plant Growth  
The Effect of Light Color on Plant Growth  
Unit 10 Vocabulary Quiz  
Unit 10 Quiz

## Unit 11 ... Photosynthesis

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Unit 11 Concepts and Terms  
Understanding Photosynthesis E-Chapter  
Understanding Photosynthesis PPT  
An Introduction to Photosynthesis and Its Applications  
Chlorophylls and Carotenoids  
PHOTOSYNTHESIS  
CHLOROPHYLL  
Photosynthesis Video 1  
Photosynthesis Video 2  
Photosynthesis Video 3  
Unit 11 Vocabulary Quiz  
Unit 11 Quiz

## Unit 12 ... Understanding Plant Respiration

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Unit 12 Concepts and Terms  
Understanding Plant Respiration E-Chapter  
Respiration Rates of Storage Tissue in Plants  
Cellular Respiration (Electron Transport Chain)

Plant Growth Factors: Photosynthesis, Respiration, and Transpiration

Photosynthesis and Respiration

Cellular Respiration Video

Unit 12 Vocabulary Quiz

Unit 12 Quiz

## Unit 13 ... Basics of Plant Growth

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Unit 13 Concepts and Terms

Basics of Plant Growth

Plant Growth

Global Plant Study by Salk Scientists Identifies Light-Adjusting Gene

Plant Growth and Development as the Basis of Forage Management

Plant Growth And Development Video

Time Lapse - Tomato Plant

Unit 13 Vocabulary Quiz

Unit 13 Quiz

## Unit 14 ... Vegetative Growth

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Unit 14 Concepts and Terms

Vegetative Growth E-Chapter

Plant Growth Regulators

Burpee Seeds

Pesticide Chemical Search

Plant Growth Regulators and Biotechnology

Wheat Seed Germination Test in Paper

Seed Germination Project

Unit 14 Vocabulary Quiz

## Unit 15 ... Plant Propagation

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Unit 15 Concepts and Terms

Propagation of Plants E-Chapter

Plant Propagation PPT

Meiosis

Learn about Tissue Culture -- Part 1

Tissue Culture - Part 2

Plant Tissue Culture

PLANT PROPAGATION: SEXUAL PROPAGATION

Sexual Reproduction in Flowering Plants

PLANT PROPAGATION: ASEXUAL PROPAGATION

Plant Propagation Chart -- Very Good KEEP!

Plant Reproduction: Asexual Reproduction

Unit 15 Vocabulary Quiz

Unit 15 Quiz

## Plant Science I Final Exam

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NAASO Survey -- PLEASE COMPLETE THE SURVEY!

Plant Science I Final Exam