

Corn Grain Model Teacher Guide

Introduction:

A typical corn grain or kernel has two growth stages. One is that of a vegetative stage where the emergence of the plant takes place and the second state is the reproductive stage, where the corn silks are outside the husks and pollination occurs.

Worksheet Guide:

Materials needed: *Corn Grain Model*, *Corn Grain Model Quick Start Guide*, *Corn Grain Model Worksheet* and *Corn Grain Model Worksheet Answer Key*.

Steps for using the *Model* and *Worksheet*:

Step 1: Have students study the location of the corn grain parts using the *Quick Start Guide* and the *Model*.

Step 2: After using the *Quick Start Guide* to get an understanding of the corn grain parts, hand out the *Worksheet* for students to complete.

Step 3: See the *Answer Key* to correct the *Worksheet*.

Key Terms and Definitions:

Discuss and demonstrate the parts on the *Corn Grain Model*:

Pericarp: part of the corn grain that is from the wall of a ripened ovary.

Endosperm: part of a seed that acts as a food store for the developing plant embryo, usually containing starch with protein and other nutrients.

Cotyledon: embryonic leaf in seed-bearing plants, one or more of which are the first leaves to appear from a germinating seed.

Coleoptile: a sheath protecting a young shoot tip

Plumule: shoot or stem of the plant

Radicle: part of a plant embryo that develops into the primary root

Coleorhiza: sheath protecting the root for germination

Tip Cap: attachment point of the corn kernel to the cob

Aleurone: protein stored as granules in the cells of the seed

Name: _____ Class: _____

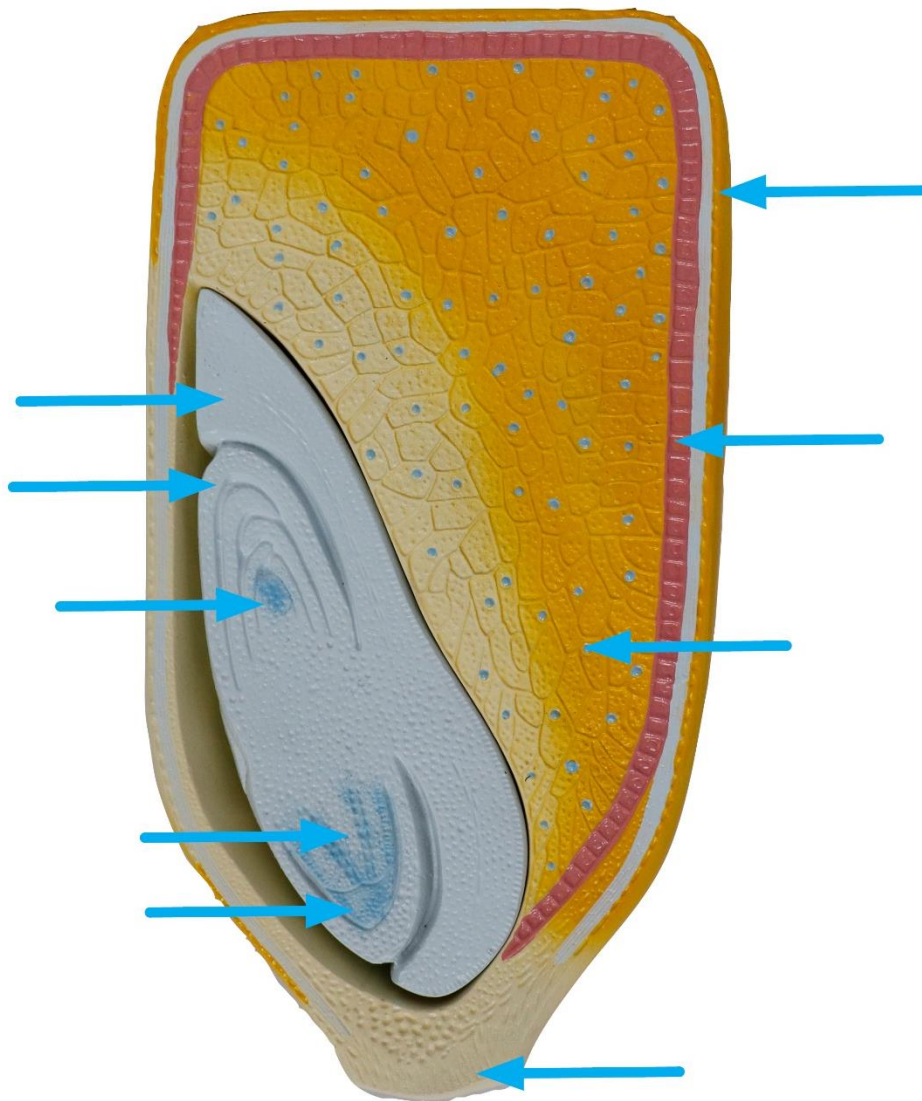
Corn Grain Model Worksheet

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Activity:

Identify each part of the Corn Grain correctly:



Corn Grain Model

Activity:

Define each part of the corn grain:

Pericarp:

Endosperm:

Cotyledon:

Coleoptile:

Plumule:

Radicle:

Coleorhiza:

Tip Cap:

Aleurone:

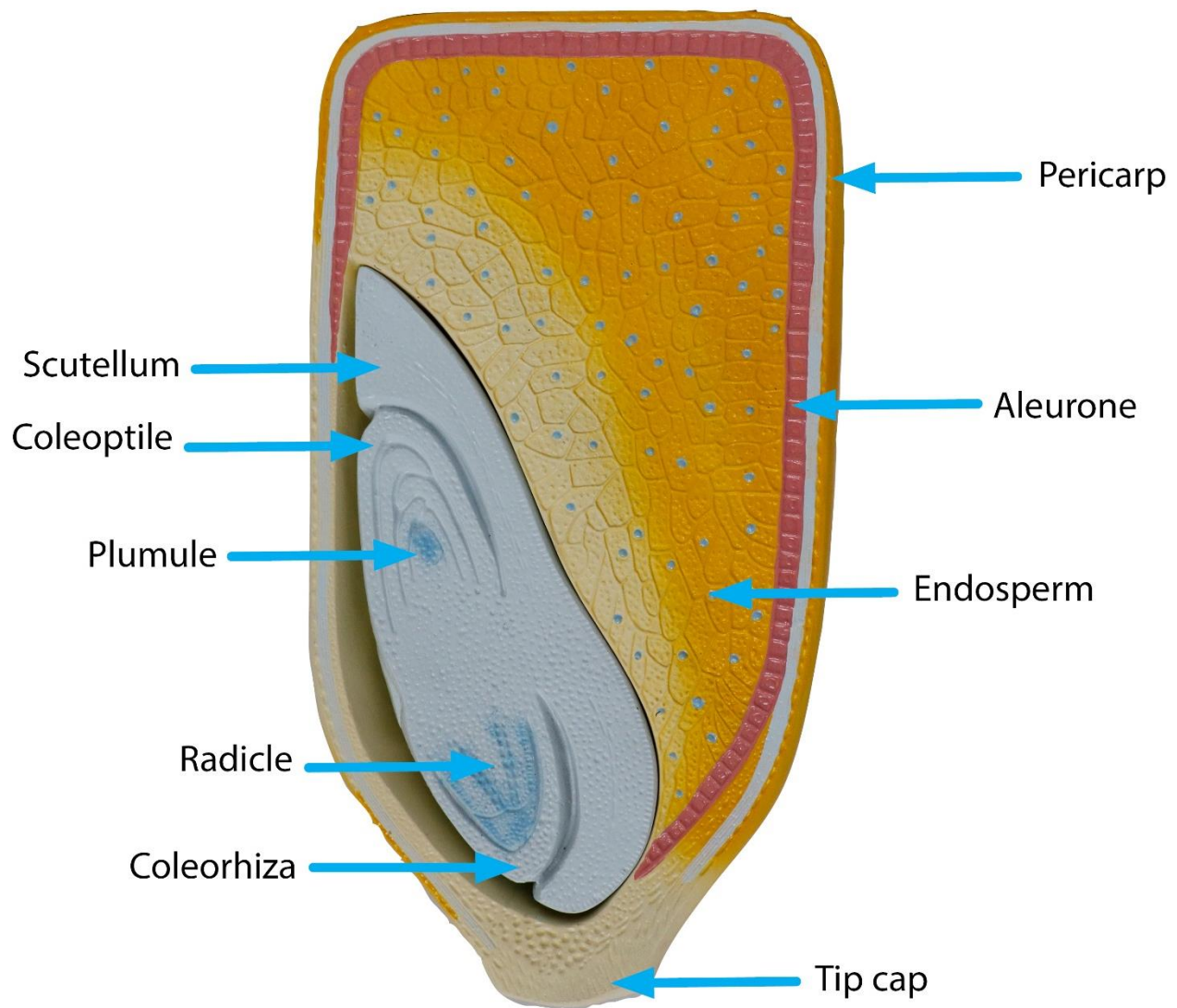
Corn Grain Model Worksheet Answer Key

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