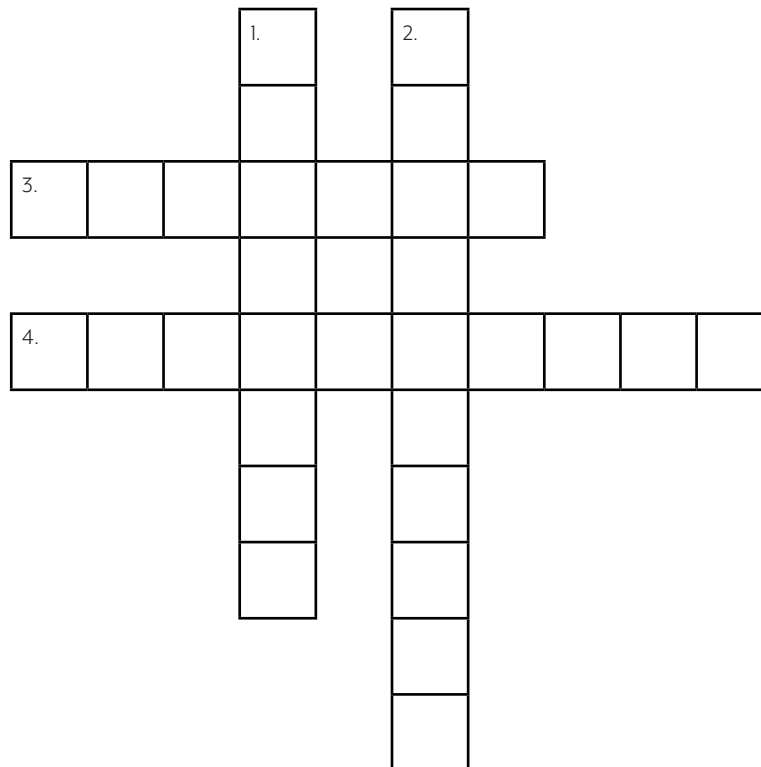


Emerging Corn Plant - 4-Digit

Dr. Huge Brain has locked his research on how corn plants grow using a 4-digit lock. He knows that he will need to start with the seed coats because they protect the starch and embryo from insects and disease.

Dr. Brain's research assistant, Sara reminded him that the first leaf, the true first leaf, comes from the inside of the coleoptile and is distinguished by a rounded tip. All other future leaves have a pointed tip. This first leaf will fall off as the plant is growing and the stem is enlarging. After six leaves have grown, the first true leaf is hard to find.

This information has allowed Dr. Brain to concentrate his attention on the growth of corn between the seed coats and first leaf. Dr. Brain is hoping that you can help him open up his research on emerging corn plant.



Across

3. First part of a growing plant embryo that emerges from the seed during germination. First root of the plant and grows downward in the soil

4. Region between the radicle and the coleoptile, which forms more roots.

Down

1. Region inside the coleoptile that forms the leaves and stems.

2. A pointed protective sheath covering the emerging shoot (epicotyl) that pushes above the ground for the first leaves to appear.