



SEEDS, the result of sexual reproduction, can be compared to EGGS of animals. SEEDS and EGGS both have 1) em ____, 2) f__d supply & 3) pro____ive cover.

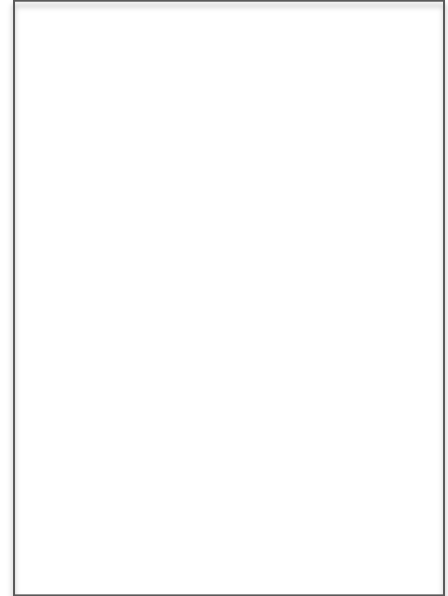
✓ X Check and X as you go.

Use a straight edge for labels.

Use your Calendar or other reference for parts.

External Corn Seed (Grain):

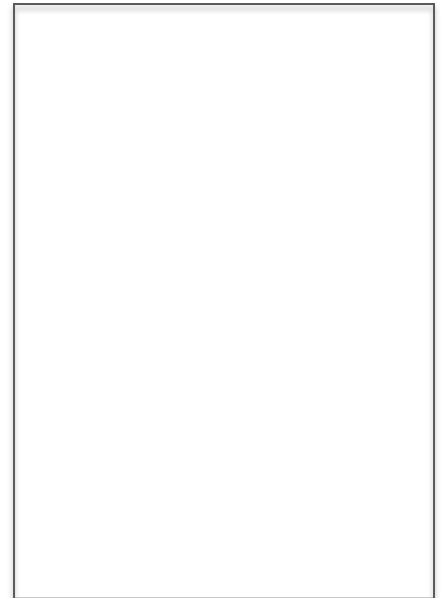
- 1. Corn seeds are more than a seeds because the FRUIT or OVARY WALL is the outer layer. Such seeds are called grains.
2. Corn grains come from female flowers packed together in an "ear". They each have a silk or stigma for collecting p____. See the poster!
3. The male flowers, "tassels", at the top of the plants produce p____. Pollen transferred to another plant by w____.
4. Examine a corn grain that has been soaked overnight.
5. The point is the "POINT OF ATTACHMENT" where it the grain was attached to the ear. Have it point down (toward you).
6. Have the corn grain on your paper with the shiny white area up.
7. The long bumpy ridge in the center of the white shiny area is the EMBRYO showing through.
8. The SILK SCAR, where the silk broke off, is a tiny raised bump up from the embryo. On a clock, it would be at 12 o'clock. It is hard to find, but you should be able to feel it, then see it.
9. Draw the external view of your corn grain. Be sure to draw an outline drawing and show the shape of the EMBRYO with an outline drawing.
10. Label the FRUIT, EMBRYO, SILK SCAR, and POINT OF ATTACHMENT.



Have checked while you have the seed

Internal Corn Seed (Grain)

- 11. Be willing to follow SAFETY RULES when using a blade.
a) Blades always POINT DOWN, toward table. NOT fingers.
b) Blades STAY at THE "CUTTING BOARD". ASK to use.
c) Fingers are always away from and ABOVE the cutting edge.
d) Sign your name that you agree.
12. Use a pen to draw an ink line on the corn to mark the EMBRYO.
13. Have your ink line checked and ASK to use the blade.
With both hands on the blade, cut straight on your ink line to cut through the entire grain. Tear what didn't cut.
14. Identify parts on the "cut" side using the drawing on your calendar.
15. The EMBRYO is usually yellowish against the white COTYLEDON. The PLUMULE (shoot) has one thin leaf, so it is just a point. The PLUMULE points UP. The RADICLE (root) points down.
16. The COTYLEDON (stored food) is white around the EMBRYO. The ENDOSPERM is also stored food. It is white or watery. ENDOSPERM starts as sugar & changes to starch.
17. Label with CAPITALIZED TERMS in 15-16. Use a }--- to label the EMBRYO as the sum of its 2 parts.



18. ASK. IODINE STAINS. Iodine indicates starch by turning black . Test the seed for the presence of starch (stored food) by taking your corn, on a paper towel, to the Iodine container. Carefully touch seed parts with the Iodine applicator. Please REPORT & clean up stray Iodine with a wet paper towel.

19. The _____ showed more starch than the _____.

Have checked while you have the seed. TAPE IT TO THIS PAPER just in case!.