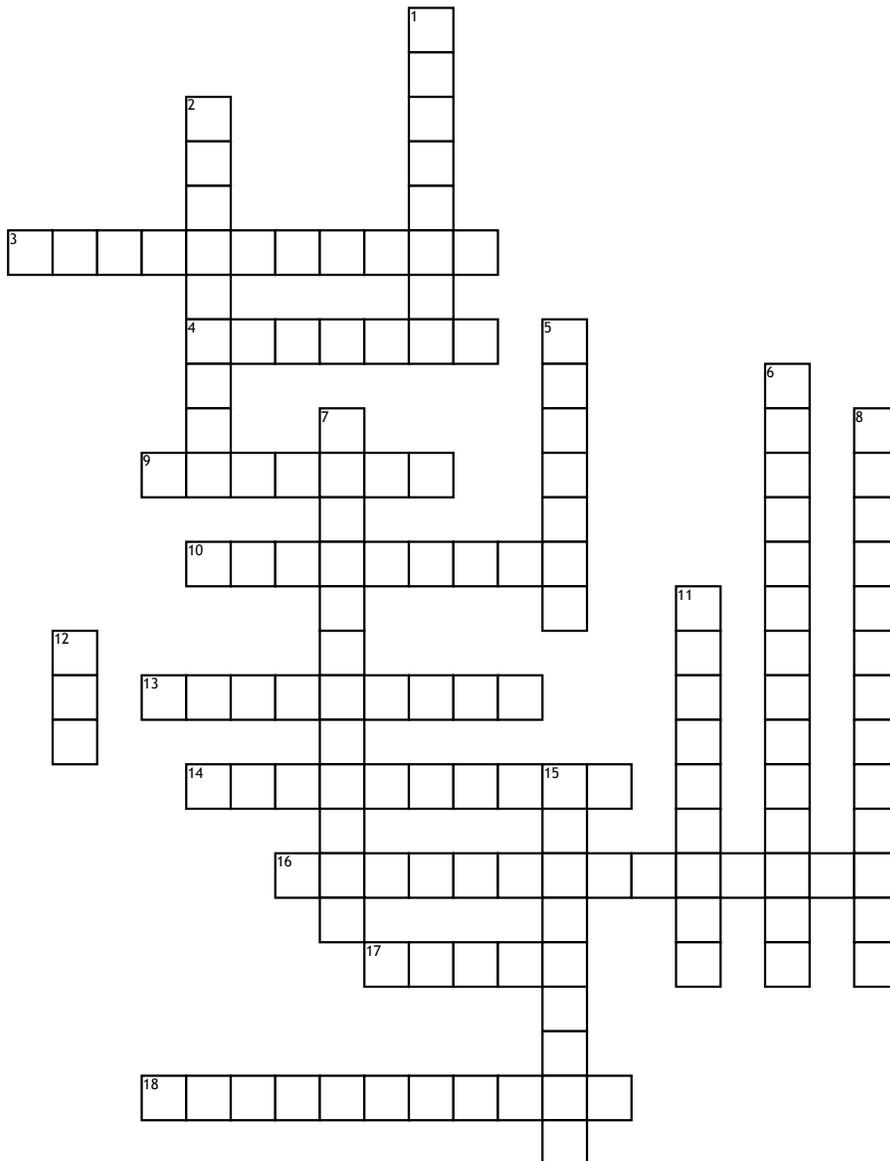


Starches



Across

3. polymer of D-glucose; characterized by a 1,6- α -glucosidic linkages in addition to 1,4- α -glucosidic linkages
4. a term used to describe the changes that occur in the starch granule when heating is continued after gelatinization has taken place causing the starch molecules to have a complete loss of granular organization
9. polymer of D-glucose; characterized by 1,4- α -glucosidic linkages
10. Both sugar and acid have a _____ effect on a gel
13. _____ during gelling disrupts hydrogen bonds already formed—and weakens the ensuing gel

14. Plastid in the cytoplasm of plant cells; site of starch storage as granules.
16. chemical change when heated without water
17. Both fats and milk proteins _____ the temperature at which maximum gelatinization and viscosity occur.
18. The _____ nature of sugars causes the sugar to compete w/ the starch for the water causing gelatinization to occur slower
- Down**

1. _____ depends on availability of free amylose molecules for hydrogen bonding, to form the continuous network
2. Starch granules are found in the _____ of an individual grain of cereal.
5. Unmodified starches tend to be _____ which is why some starches are modified

6. physical change caused by being heated with water
7. produced commercially from the cassava plant (manioc) and from potatoes (tubers)
8. When viewed under polarized filters placed at right angles to each other, raw starch granules reveal a _____
11. _____ starches are those that are not digested until they enter the large intestine
12. at temperatures near _____ degrees C some of the granules in starches begin to implode and fragment, a change that reduces viscosity
15. Separation of the liquid from a gel is called _____