

## Lipids

1. Recall the structure of a saturated \_\_\_\_\_ acid. Draw one here:
2. Sometimes, \_\_\_\_\_ acids are \_\_\_ saturated which means there is at least one \_\_\_\_\_ bond between \_\_\_\_\_ atoms. If there is only one \_\_\_\_\_ bond, it is called a \_\_\_\_\_ fatty acid. When there are more than one, it is called \_\_\_\_\_.
3. There are two isomers of \_\_\_\_\_ acids called \_\_\_\_\_ and \_\_\_\_\_. Sketch them below to compare them:
4. The \_\_\_\_\_ isomer is more dangerous for your health than \_\_\_\_\_ fats. We know this because \_\_\_\_\_ fats have been found in arterial \_\_\_\_\_ of people who suffer from \_\_\_\_\_ heart disease.
5. The formula for body-mass index is:  
  
The range for underweight is less than \_\_\_\_\_, normal weight ranges between \_\_\_\_\_ and \_\_\_\_\_. Over-weight ranges between \_\_\_\_\_ and \_\_\_\_\_. Obesity is generally considered to be over \_\_\_\_\_. A \_\_\_\_\_ is an easier way of making the calculation by simply using a ruler.
6. If 3 fatty \_\_\_\_\_ bond to one \_\_\_\_\_ molecule, the resulting molecule is called a \_\_\_\_\_. This is a \_\_\_\_\_ reaction because a polymer is being formed from \_\_\_\_\_. This means \_\_\_\_\_ is released.

7. If 2 fatty \_\_\_\_\_ bond to a \_\_\_\_\_ and a \_\_\_\_\_, the resulting molecule is called a \_\_\_\_\_. This molecule is **crucial for forming the bilayer**.
8. Another category of fats are \_\_\_\_\_. These are molecules with \_\_\_\_\_ fused rings. There are four important examples: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_. You do not need to know their detailed structure.
9. Lipids are a better way to store \_\_\_\_\_ than in \_\_\_\_\_ form. This is because lipids are \_\_\_\_\_ because they store more \_\_\_\_\_ per gram. However, they take \_\_\_\_\_ to break down.

Need a little help? Here are the words to fill in. Some appear more than once.

un acids plaques energy mono phosphate water carbon glycerol carbohydrate steroid cis trans  
 4 unsaturated saturated nomogram 18.5 24.9 29.9 30 25 condensation monomers triglycerides