USE A SOCKET SET

If you ever work on an engine or something mechanical like that, the chances are you're going to use a socket set. It's kind of like using a wrench, but better in a lot of ways and makes the job faster.

So a socket set will come with the ratchet, but it will also come with a set of different sized sockets. You need all those because nuts and bolts come in lots of different shapes and sizes.

FLIP OVER FOR YOUR NEXT CHALLENGE

SKILL TREK
FIELD GUIDE FOR LIFE

EARN THIS NUGGET

Undo and then tighten ten nuts/bolts. Do as many different sizes as you can. If possible more than one mechanical item. It would be great if one was metric and one standard.

There is one more thing that makes things a little bit more complicated. There are metric and standard sizes. Standard are generally things made in America and metric are things made outside of the US.

So this is what we will try, see if your parents can find something with nuts and bolts holding it together that you could do a little work to. Generally, a bicycle has a few things on it that you can use a socket set on but not many.

1. Do you know where the item that you are working on was made? This will give you a hint about whether it will be metric or standard.
2. Find a nut that you want to undo (a nut is a small hexagonal piece that screws onto a bolt. it is generally easier to unscrew a nut from the bolt. There may also be bolts that screw directly into what you are working on. You can try those too.)
3. Select the right sized socket. This should fit onto the nut or bolt almost perfectly. If there is a bunch of wiggle it will probably slip and damage the nut.
4. Once you know what socket size you want, snap that socket onto the ratchet. Now notice the socket will not turn one way, but will "ratchet" or click in the other direction.
5. To undo a nut, we want to go Lefty-Loosey, so you may need to change the setting on the ratchet if it will tighten the nut rather than loosen it. The setting is changed with a little switch on the head of the ratchet.
6. After this, you can screw the nut back in (Righty-Tighty). Change the setting on the ratchet again. Tighten it as far as you can by hand, then finish it with the socket and ratchet.

Good job, and that is what a wrench is all about. Now make sure you put everything away again.