

**Source:**

## 1 | Bonds

### Carbohydrate Chains

- Larger chains of carbohydrates don't have less, or more energy at the end of a reaction than separate monomers since entropy.
- A lot of carbohydrates moving around have a non-zero, but small chance of connecting.
  - The longer the chains of carbohydrates, the less of a chance they have to connect to each other
    - It's going to take a lot of energy to organize and then some energy is going to be released when they bond, but by the end it'll be very complex.
    - Eventually this will break up and you'll get the energy back
- When forming complex molecules, you need energy, heat, something to put everything in place