

4th Grade Science (2a) – Plants are the primary source of matter and energy entering most food chains.

5th Grade Math (2.0) – Performing calculations and solving problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.

Energy... Use it and Lose it

As energy is transferred in the food chain, most of it is lost. When we say lost we mean it is used up as heat or to power activities like growth, movement or breathing.



Think of how much food you eat.
The average sixth grader eats almost two pounds of food per day.
How much does the average sixth grader eat in a week?
Take 1.89 pounds and multiply it by 7 days.
 $1.89 \times 7 = \underline{\hspace{2cm}}$.

How much does the average sixth grader eat in a year?
Take 13.23 pounds and multiply it by 52 weeks.
 $52 \times 13.23 = \underline{\hspace{2cm}}$.

Holy chicken-fried steaks, that's a lot of green beans!

Why don't you weigh 687.96 pounds?

People can't take the sun's energy and make food the way that producers can. You and I must eat our food. The food gives us the energy that our bodies need just to keep us up and running.

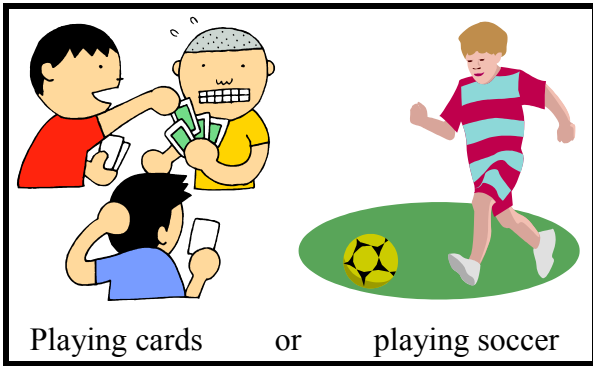
Now write down 4 things that you eat that **give** you energy:

_____, _____, _____, _____.

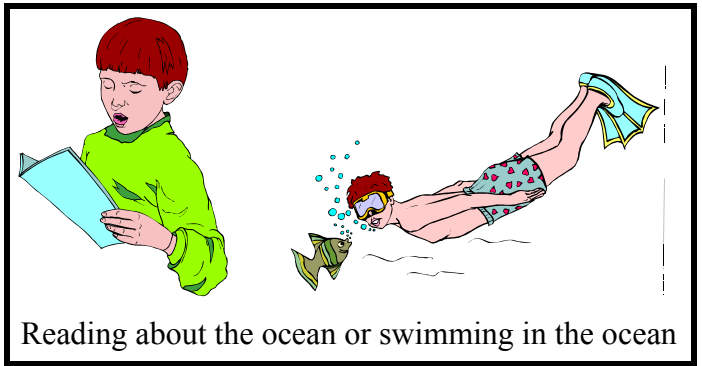
Write down 4 things you do where you **lose** energy:

_____, _____, _____, _____.

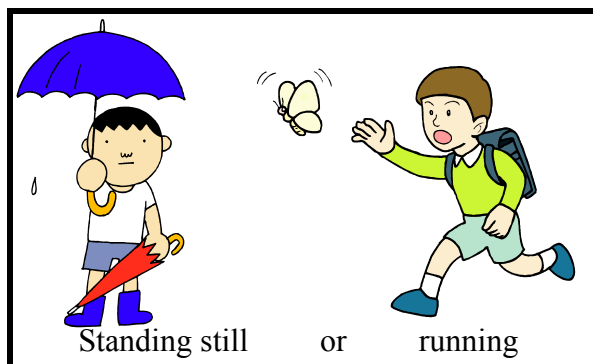
Look at each of these activities. Circle the ones that cause you to **LOSE** more heat.



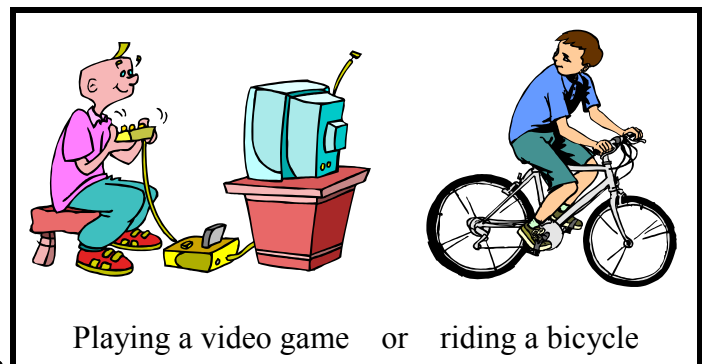
Playing cards or playing soccer



Reading about the ocean or swimming in the ocean



Standing still or running



Playing a video game or riding a bicycle