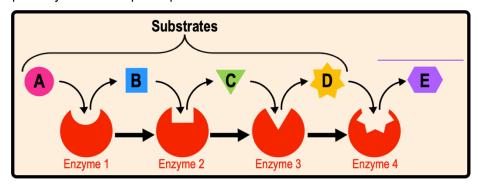
CONCEPT: INTRODUCTION TO METABOLISM

• **Metabolism:** _____ of an organism's *chemical reactions*.

□ *Metabolic* ______: series of reactions that alters a substrate multiple times before the final product.

EXAMPLE: Metabolic pathways have multiple steps.



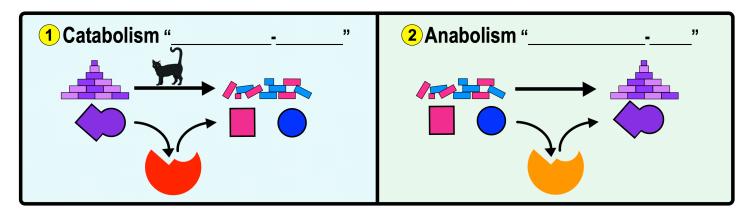
Catabolic & Anabolic Pathways

•There are _____ types of *metabolic pathways*:

____abolic Pathways (Catabolism): releases energy by breaking-_____ molecules into smaller ones.

2 Anabolic Pathways (Anabolism): spends energy to build-_____ larger molecules (like DNA & proteins).

EXAMPLE: Catabolic vs. Anabolic Reactions.



PRACTICE: Which of the following terms specifically describes the metabolic process of breaking down large molecules?

a) Catabolism.

b) Metabolism.

c) Anabolism.

d) Dehydration.

PRACTICE: Which of the following statements is TRUE regarding anabolic pathways?

- a) They are used for digesting sugars.
- b) They consume energy to build up polymers from monomers.
- c) They release energy by breaking down polymers into monomers.
- d) They increase the entropy of the organism.