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| *Answer:* TSH (thyroid stimulating hormone)  *Read:* A biological catalyst that speeds up a reaction by lowering the activation energy without being consumed | *Answer:* metabolism  *Read:* within metabolism, hydrolysis would be considered this process which breaks down larger molecules into smaller units |
| *Answer:* enzyme  *Read:* a temporary structure that forms when a substrate binds to an enzyme | *Answer:* catabolism  *Read:* biochemical reactions usually require more than one enzyme. This is a series of enzymes functioning in a sequence to produce a final product. |
| *Answer:* enzyme-substrate complex  *Read:* The site to which a coenzyme binds. Binding to this site causes the shape of the enzyme to change and allows a substrate to bind. | *Answer:* metabolic pathway  *Read:* this is the amount of energy that reactants have to overcome in order for a reaction to occur and to form a product |
| *Answer:* allosteric site  *Read:* lead is an example of this type of inhibitor which competes for the allosteric site | *Answer:* activation energy  *Read:* These are the factors that affect the rate of an enzyme catalyzed reaction. |
| *Answer:* non-competitive inhibitor  *Read:* Enzymes function most effectively when these two conditions are maintained. | *Answer:* concentration (of substrate or enzyme), temperature, pH and inhibitors  *Read:* This inhibitor so closely resembles the substrate that it competes directly with the substrate for access to the active site. |
| *Answer:* optimal pH and temperature  *Read:* This groove in an enzyme has R groups exposed which attract a specific substrate. | *Answer:* competitive inhibitor  *Read:* This model describes how the binding of the substrate changes the shape of the enzyme and allows it to function. |
| *Answer:* active site  *Read:* these molecules bind to the allosteric site of an enzyme and causes the shape of the active site to change so that the substrate can bind to it | *Answer:* induced fit model  *Read:* This is a hormone that controls metabolism. It is produced by the thyroid gland. |
| *Answer:* coenzyme  *Read:* this process describes the breaking down and rebuilding of molecules within an organism | *Answer:* thyroxin  *Read:* This is a hormone that controls the production of thyroxin and may be controlled through negative feedback (aka feedback inhibition). It is produced in the pituitary gland |