

MODELING ATP

NAME

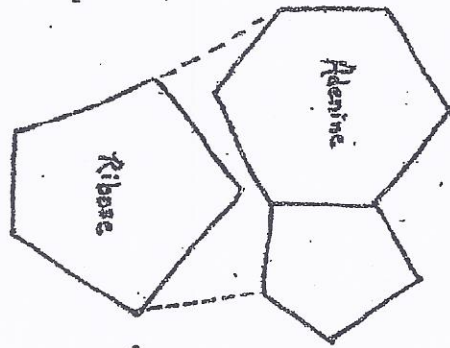
Classset

1. Using your book and notes, take the packet of cutouts and arrange them on your table top to represent an ATP molecule. Let your teacher initial in the blank that you have constructed a correct model.

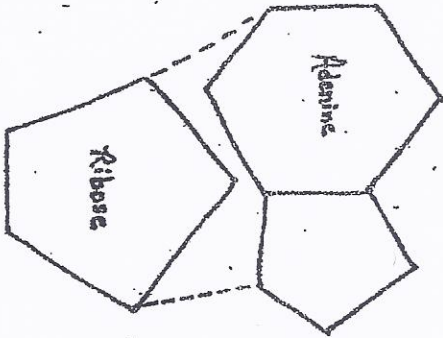
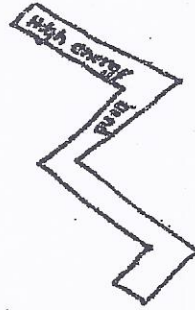
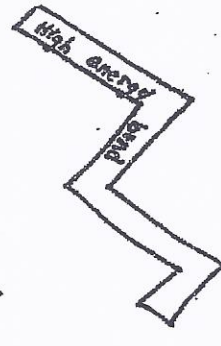
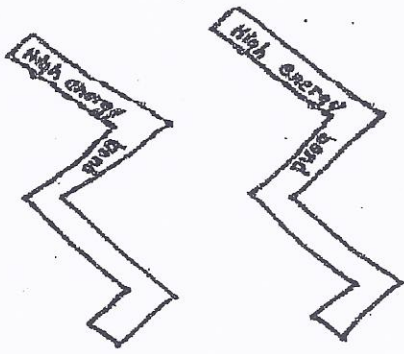
_____ (teacher initials)
2. Now make your ATP molecule model form ADP. What changes do you have to make to your original model?
3. Now re-form ATP from your ADP model. What changes do you have to make?
4. Answer the questions below. Use your models if needed to understand the concepts.
 - (a) What is the structural difference between ATP and ADP?
 - (b) Which molecules are contained in both ATP and ADP?
 - (c) In which structure, ATP or ADP, is more energy stored? Where is this energy stored?
 - (d) Write an equation showing the conversion reactions of ATP to ADP. Make sure you show energy!
 - (e) Write an equation showing the conversion reactions of ADP to ATP. Make sure you show energy!
 - (f) Describe in words what takes place in the process of converting ADP to ATP.
 - (g) Describe in words what takes place in the process of converting ATP to ADP.

ATP/ADP MODEL

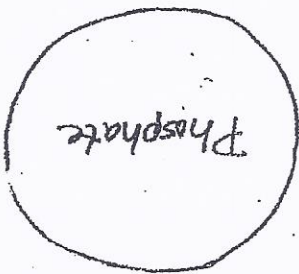
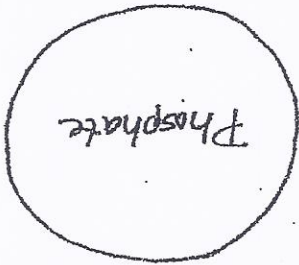
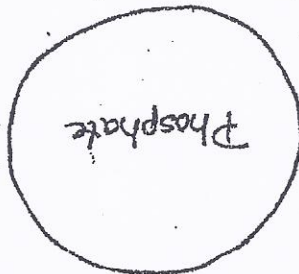
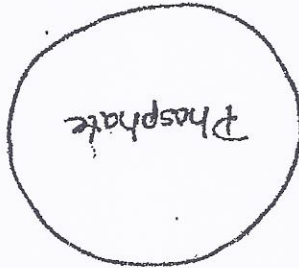
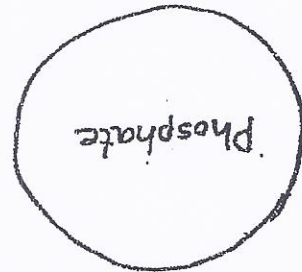
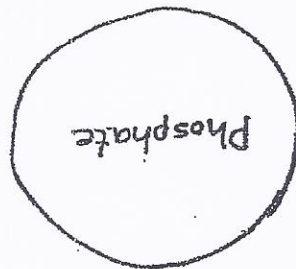
(1)



← cut out as a piece unit!



← cut out as a piece unit!



(11)