# DORMITORY DRAMA

RULES:
1. COLLEGE STUDENTS ARE LAZY
2. DORMS ARE UNASSIGNED
3. ONE STUDENT PER ROOM UNLESS ALL ROOMS ON A FLOOR ARE FILLED. A FILLED ROOM CONSISTS OF 2 STUDENTS.
4. MUST ABIDE BY STATE FIRE CODE--BED HEADBOARDS MUST FACE IN OPPOSITE DIRECTIONS

DIRECTIONS:
1. HOW MANY FLOORS ARE IN EACH DORM?
   - A. DORM 1 - _____
   - B. DORM 2 - _____
   - C. DORM 3 - _____
   - D. DORM 4 - _____

2. HOW MANY ROOMS ARE ON EACH FLOOR?
   - A. FLOOR 1 - _____
   - B. FLOOR 2 - _____
   - C. FLOOR 3 - _____
   - D. FLOOR 4 - _____

3. PLACE STUDENTS (🧍) IN DORMS AND DORM ROOMS ACCORDING TO THE ABOVE RULES

ENTHUSIASTIC ELECTRONS
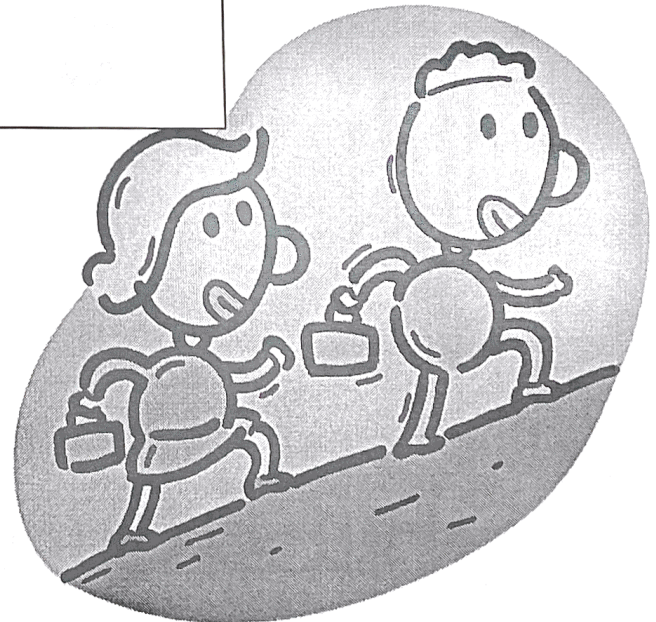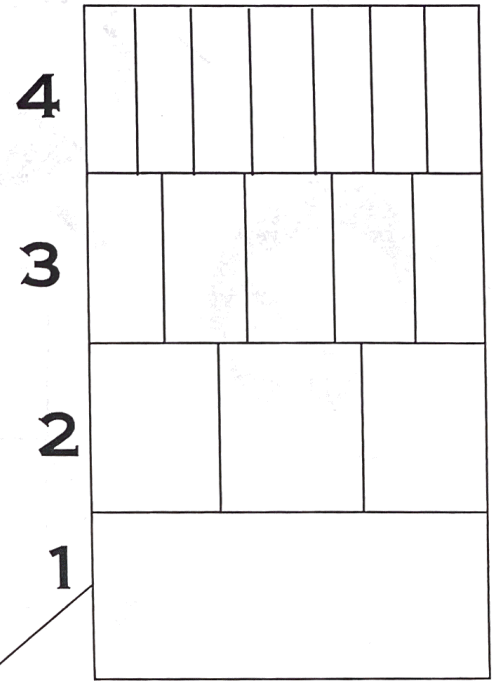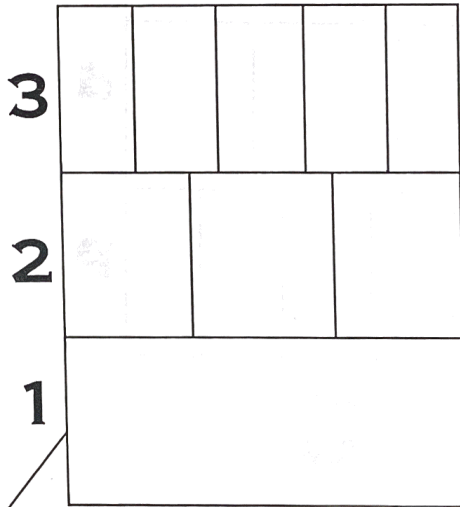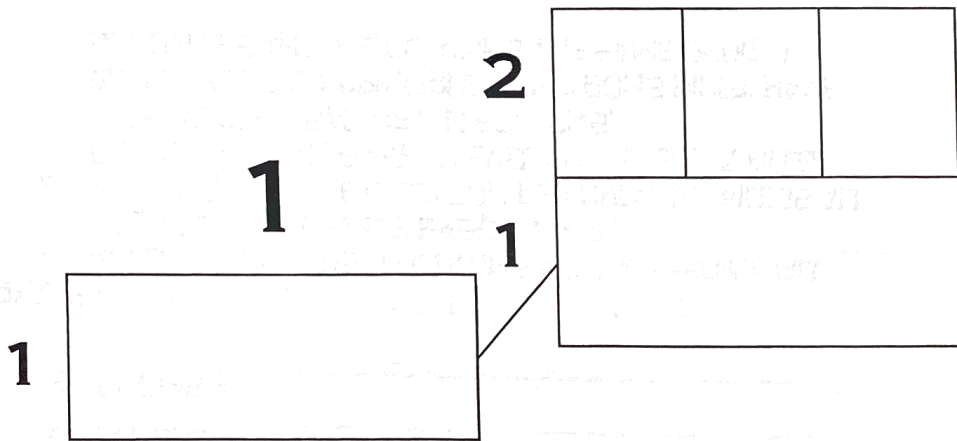
RELATIONSHIPS:
1. DORMS = _____
2. FLOORS = _____
3. ROOMS = _____

RULES:
1. **AUFBAU PRINCIPLE:** ELECTRONS ARE LAZY--THEY FILL ORBITALS OF LOWEST ENERGY FIRST.
2. **HUND'S RULE:** ONE ELECTRON PER ORBITAL UNLESS ALL ORBITALS ON AN ENERGY LEVEL ARE FILLED. A FILLED ORBITAL CONSISTS OF 2 ELECTRONS.
3. **PAULI EXCLUSION PRINCIPLE:** ELECTRONS MUST HAVE OPPOSITE SPINS IF OCCUPYING THE SAME ORBITAL

DIRECTIONS:
1. HOW MANY SUBLEVELS ARE IN EACH ENERGY LEVEL?
   A. ENERGY LEVEL 1 - _____
   B. ENERGY LEVEL 2 - _____
   C. ENERGY LEVEL 3 - _____
   D. ENERGY LEVEL 4 - _____

2. HOW MANY ORBITALS ARE IN EACH SUBLEVEL?
   A. SUBLEVEL s - _____
   B. SUBLEVEL p - _____
   C. SUBLEVEL d - _____
   D. SUBLEVEL f - _____

3. PLACE ELECTRONS ($\uparrow$) IN ENERGY LEVELS AND ORBITALS ACCORDING TO THE ABOVE RULES

1

s

2

p

s

3

d

p

s

4

f

d

p

s
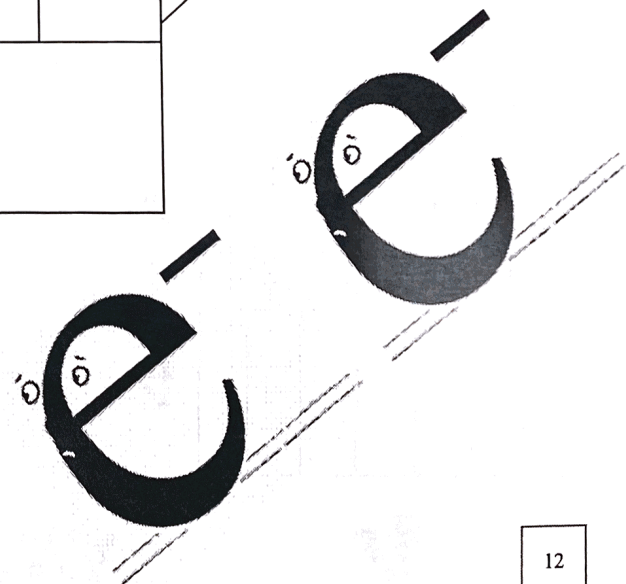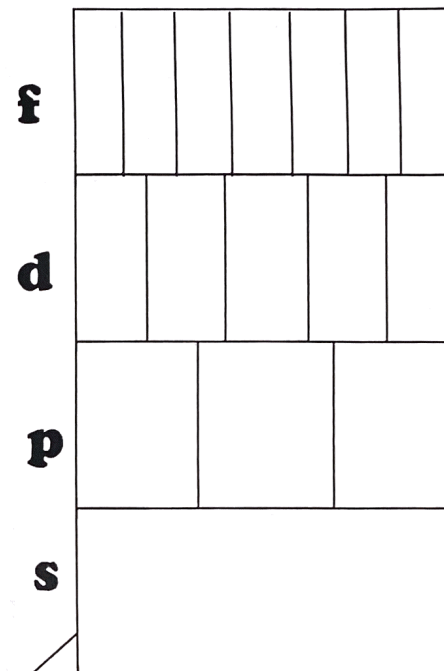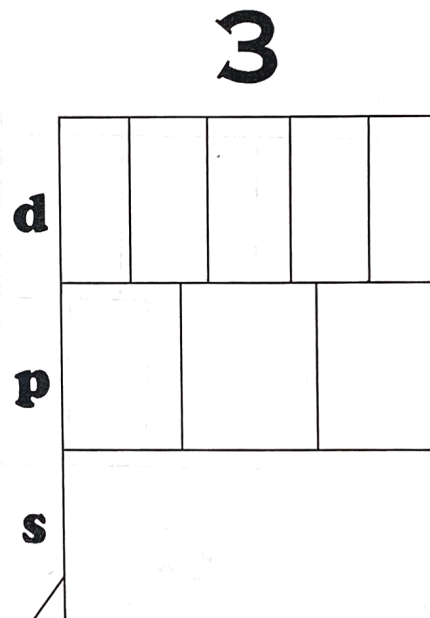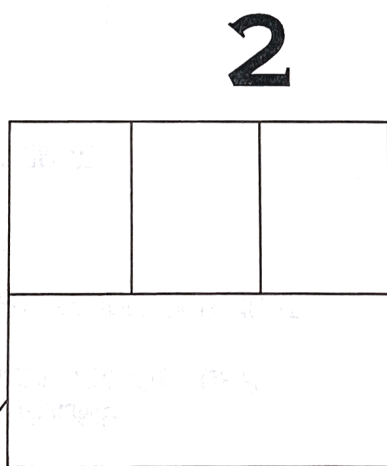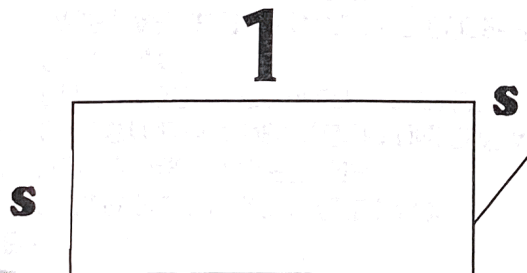
CONCLUSIONS:

1. USE WHAT YOU HAVE LEARNED ABOUT THE FIRST FOUR ENERGY LEVELS AND SKETCH A DRAWING OF THE FIFTH ENERGY LEVEL.

A. WHAT SUBLEVELS EXIST? _____

B. HOW MANY ORBITALS EXIST IN EACH SUBLEVEL? _____

C. WHAT IS THE MAXIMUM NUMBER OF ELECTRONS THAT CAN EXIST IN THE 5TH ENERGY LEVEL? _____

2. COMPLETE THE FOLLOWING CHART:

ENERGY LEVEL	TOTAL # OF SUBLEVELS PER ENERGY LEVEL	SUBLEVEL DESIGNATION (s, p, d, f, etc.)	# OF ORBITALS PER SUBLEVEL	TOTAL # OF ELECTRONS PER ENERGY LEVEL
1				
2				
3				
4				
5				