B. Red Blood Cells

Color and label:

1. ○ red blood cells (red)
2. ○ bone (marrow)
3. ○ erythropoietin
4. ○ kidney
5. ○ liver
6. ○ spleen
7. hemoglobin
   a. ○ globular polypeptide chain
   b. ○ heme (porphyrin ring + iron)
8. ○ bilirubin
9. ○ gallbladder

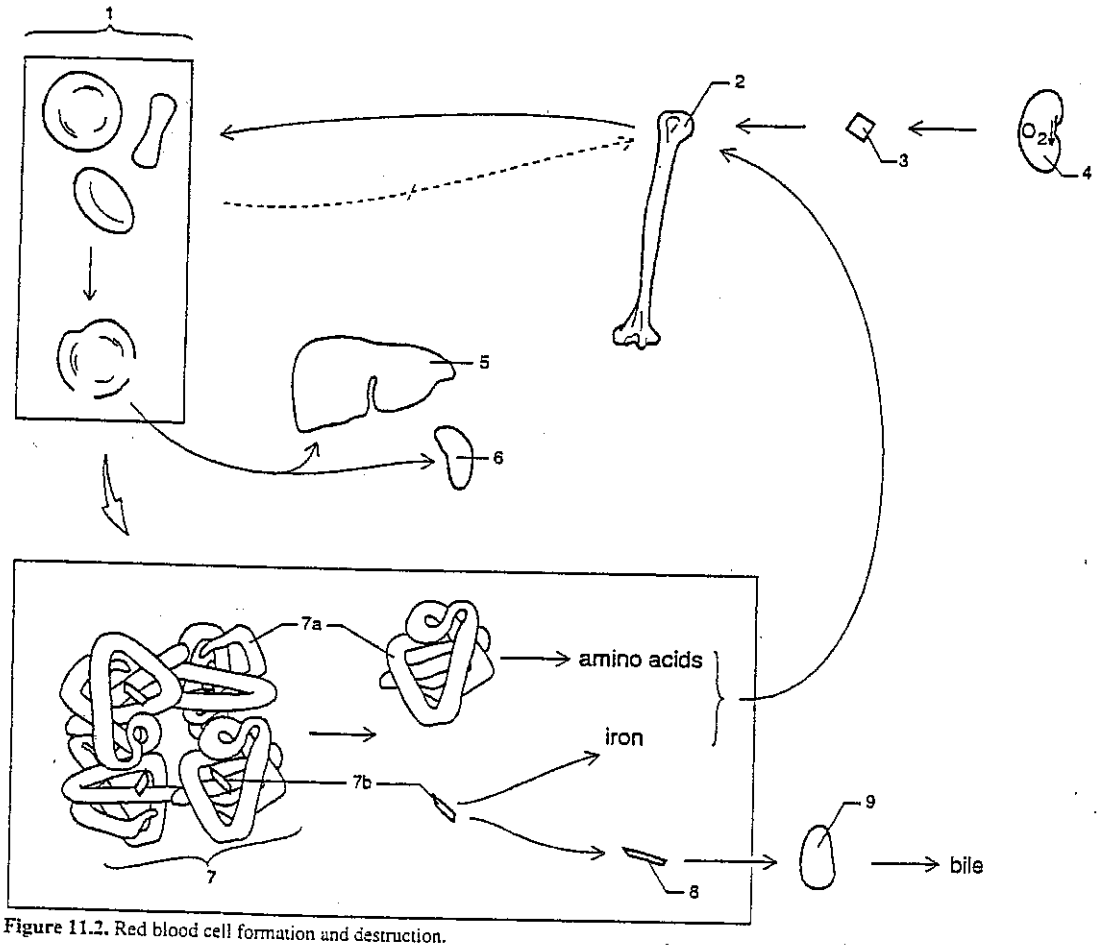

Figure 11.2. Red blood cell formation and destruction.

Exercise 11.2:

1. Red blood cells are made in the _____ when stimulated by the hormone _____ .
2. Erythropoietin forms when O_2 levels in the kidney are _____ (high, low).
3. A high red blood cell count _____ (stimulates, inhibits) further red blood cell production.
4. Old or damaged red blood cells are destroyed by the _____ and _____ .
5. Red blood cells contain the oxygen-carrying protein _____ .
6. Hemoglobin contains four _____ chains, each with a central _____ .
7. When hemoglobin breaks down, what happens to its components?
   a. globular polypeptide chains
   b. iron (from heme)
   c. porphyrin ring (from heme)