Question 1.

```java
public Species(String species, int y) {
    this.species = species;
    if (y != 0) {
        endangered.add(this);
    }
    year = y;
}
public String toString() {
    return super.toString() + " with " + legs + " legs";
}
```

Question 2 Note: method specs are omitted because they are on the test itself.

```java
public Species(String species) {
    this(species, 0); // sadly, species = s; was also valid...
}
public void setYear(int b) {
    if (year == 0)
        endangered.add(this);
    year = b;
}
public Animal(String s, int n) {
    super(s, 0); legs = n;
}
(One could have used super(s) above instead of super(s, 0)).
```

Question 3 (many solutions possible, 2 shown here)

```java
public static String fixBlanks(String s) {
    int k = s.indexOf(" ");
    if (k == -1)
        return s;
    int h = s.lastIndexOf(" ");
    return s.substring(0,k) + " " + s.substring(h+1);
}
```

Could also have had the body

```java
int k = s.indexOf(" ");
if (k == -1)
    return s;
return s.substring(0,k) + " " + s.substring(k).trim();
```

Question 4

(a) Species.endangered.size()

(b) 1. Draw a frame for the call
    2. Assign arg values to parameters
    3. Execute the method body
    4. Erase the frame for the call

(c) (isMale() && age > 75) || (!isMale() && age > 80)

(d) Field: declared in a class.
    Static variable: declared in a class.
    Parameter: declared within () of method header.
    Local variable: declared in method body.