DEV Day Two Interpretation Questions

1. Interpret your data, if possible, from observing the zebrafish embryos. This should include the answers to the questions:

a) What stage embryos did you observe?
b) What did you observe in these embryos that was expected and unexpected?
c) Did you observe differences between untreated and LiCl treated embryos? If so, what differences?

2. Interpret your data from visualizing your agarose gel. This should include the answers to the questions:

a) The sizes of the 28S and 18S rRNAs are 4.7 kB and 1.9 kB, respectively. Can you see these bands on your gel? In which lanes?
b) Are the bands distinct or fuzzy? What does it mean if they're fuzzy?
c) Does the intensity of the bands fluctuate from one lane to another? If so or if not, why? Should the intensity fluctuate? What, if anything, are you going to do about intensity fluctuations for the gel for your Northern blot?

3. Give three examples of teratogens (other than LiCl, alcohol, and nicotine), and explain briefly why the alterations in development caused by teratogens are NOT heritable.

4. Why did we use a denaturing agarose gel today? If we did **not** run a denaturing gel today, what piece of information about *zcyt1* mRNA would we be unable to determine?