

FACULTY NOTES

The LTAs and Spinoffs are designed so that each professor can implement them in a way that is consistent with his/her teaching style and course objectives. This may range from using the materials as out-of-class projects with minimal in-class guidance to doing most of the work in class. The LTAs and Spinoffs are amenable to small group cooperative work and typically benefit from the use of some learning technology. Since the objective of the LTAs and Spinoffs is to support the specific academic goals you have set for your students, the Faculty Notes are not intended to be prescriptive. The purpose of the Faculty Notes is to provide information that assists you to take full advantage of the LTAs and Spinoffs. This includes suggestions for instruction as well as answers for the exercises.



FACULTY NOTES

SPINOFF 5C

Calculating the Reference Dose

Answers

Question 1:

Chemical Name	Reference Dose	70 kg	180 lb.
Acetone	0.1	7mg	8.18mg
Benzoic Acid	4,000	280mg	327.27mg
Calcium Cyanide	0.04	2.8mg	3.27mg
Isobutyl Alcohol	0.35	24.5mg	28.64mg
Cadmium	0.0005	0.035mg	0.041mg

Question 2:

- a) NOAEL: 5.65 mg/kg-day LOAEL: 10.876 mg/kg-day
Reference Dose : 0.0565 mg/kg-day (NOAEL), 0.01876 mg/kg-day (LOAEL)
- b) NOAEL: 100 mg/kg-day LOAEL: 500 mg/kg-day
Reference Dose : 0.1 mg/kg-day (NOAEL), 0.05 (mg-k_g)/day (LOAEL) Note: subchronic study
- c) NOAEL: There really does not exist one in this study, the control group is not used for NOAEL
LOAEL: 0.023 mg/kg-day
Reference Dose: 0.00023 mg/kg-day
- d) NOAEL: 233 mg/kg-day LOAEL: 625 mg/kg-day
Reference Dose: 2.33 mg/kg-day (NOAEL), 0.625 mg/kg-day (LOAEL) Note: This assumes study is not subchronic.

Answers for the discussion question can vary.