

Experimental Models and Animal-care Records

Experiment 1 - Practical Notes

Name: _____ Roll no.: _____ Date: _____

Teaching mode: use approved simulation, prepared demonstration records or supplied experimental data.
No live-animal dosing, surgery or challenge is prescribed in these notes.

Aim

To identify common model categories and review an animal-care record.

Principle

Experimental interpretation depends on model suitability, welfare, randomisation, controls and a valid outcome measure. Species, strain and sex can affect findings.

Requirements

- Instructor-provided labelled diagrams, traces or data for this activity.
- Calculator, graph paper or spreadsheet, and the activity record.

Procedure

1. Identify model information

Enter the supplied species/strain, sex, age or weight range and scientific purpose without inventing an experimental animal record.

2. Assess ethical design

Explain replacement, reduction and refinement, the approved review process and the role of a trained supervisor.

3. Read care and handling records

Identify acclimatisation, health and welfare observations recorded in the supplied approved demonstration.

Pharmacology II

4. Evaluate applicability

Explain why a model endpoint may not directly predict a clinical effect in humans.

Observations and Record

Record item	Entry
Activity / material identifier	_____
Measurement or visible feature	_____
Comparison / calculated outcome	_____
Interpretation and limitation	_____

Result

The recorded finding is ____; the supporting observation or calculation is _____. The main limitation is _____.

Precautions

- Use the supplied teaching material; distinguish a measured observation from an assumed value.
- Keep units, axes, labels and measurement conditions consistent.
- Record limitations and seek instructor review before applying a conclusion to a live case.

Viva Questions and Answers**1. What are the three Rs?**

Replacement, reduction and refinement.

2. Why record the model details?

They affect interpretation and reproducibility of the endpoint.

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