

# Lt Example Data Checklist

# Teach students in the lab and remotely with example data in Lt



# Quickly identify content in Lt that provides example data preloaded in Lt Data Panels, in alternative formats, or not at all.

- Lt Example Data = Data collected with hardware and stored in Lt Data Panels.
- Alternative Data = Data provided in table- or multimedia-based formats. These data are supplied variously in the lab itself and/or in the Instructor's Material.
- Unavailable = These labs have no example data available for most or all activities.
- Distance Learning Version Available = These alternate versions of existing labs are designed explicitly for distance use.
  Instructor's Material = PDFs found in the "Lesson Details" card that contain useful information including a materials list, example data in table- or multimedia-based formats, tips for educators, and hazard warnings.

#### Anatomy

- Cardiovascular System
- Central Nervous System
- Digestive System
- Endocrine System
- Integumentary System
- Lymphatic and Immune
- Muscular System
- Reproductive System
- Respiratory System
- Skeletal System
- Special Senses
- Tissues
- Urinary System

# **Animal Physiology**

- Animal Metabolism
- Cockroach Sensory Nerve
- Cockroach Ventral Nerve Cord
- Earthworm Action Potentials
- Earthworm Smooth Muscle
- Frog Heart
- Frog Nerve
- Frog Neuromuscular Junction
- Frog Skeletal Muscle
- Gin Trap Closure Reflex
- Intracellular Action Potentials



#### **Biology** (For use with Vernier Go Direct<sup>®</sup> Sensors)

- Acid Rain
- Animal Behaviour
- Aquatic Photosynthesis
- •• Bacterial Transformation
- Biological Membranes
- Cellular Respiration
- CRISPR
- Diffusion Through Membranes
- DNA Structure and Replication
- Ecology and Biodiversity
- ELISA: Giant Panda Problem
- Enzyme Action: Testing Catalase Activity
- Exploring the Greenhouse Effect
- Forensic DNA Fingerprinting
- From DNA to Protein
- Genetics of Drosophila
- Interdependence of Plants and Animals
- Introduction to Cells
- Introduction to Microscopy
- Introduction to Molecular Evolution
- Limitations on Cell Size
- Macromolecules: Proteins
- Measuring Primary Productivity
- Metabolisation of Sugars by Yeast
- Mitosis and Meiosis
- Modeling Population Dynamics
- Osmosis
- Photosynthesis
- Polymerase Chain Reaction (PCR)
- Population Dynamics
- Population Genetics and Evolution
- The Visible Spectra of Plant Pigments
- Transpiration
- Turnip Peroxidase

# **Clinical Skills**

- Assessment Tools
- Clinical Measurements I
- Clinical Measurements II
- CPR
- Fluid and Nutrition
- Health History and General Survey
- Health Literacy
- Health Promotion and Community Nursing
- Hygiene and Personal Care
- Indwelling Catheter
- Intravenous (IV) Fluid Infusion
- Medical Administration I
- Medical Administration II
- Nasogastric Intubation
- Oxygen Therapy
- Peripheral Assessment
- Promoting Comfort
- Safety
- Sterile Fields
- Supporting Elimination
- Therapeutic Communication
- Vital Signs

#### **Chemistry** (For use with Vernier Go Direct<sup>®</sup> Sensors)

- Acid-Base Titration
- Beer's Law
- Boyle's Law and Charles' Law
- Conductimetric Titration and Gravimetric Determination of a Precipitate
- Determining a Chemical Formula
- Determining an Equilibrium Constant
- Determining the K<sub>sp</sub> of Calcium Hydroxide
- Dissociation Constants
- Electrochemistry: Voltaic Cells
- Evaporation and Intermolecular Attractions
- Identifying an Unknown Diprotic Acid
- Liquid Chromatography
- Measuring and Predicting Heats of Reaction
- Molar Volume of a Gas
- Properties of Solutions: Electrolytes and Nonelectrolytes
- Rate Law Determination
- •• Standardizing a Solution
- Synthesis and Analysis of Aspirin
- Temperature and State Changes

# **Human Physiology**

- Airflow
- Autonomic Nervous System (ANS)
- Blood Clotting
- Blood Counting
- Blood Pressure
- Body Temperature
- Breathing
- Cardiorespiratory Effects of Exercise
- Cardiovascular Effects of Exercise
- Diving Response
- Electroencephalography (EEG)
- Electrooculography (EOG)
- Endocrine Physiology
- Energy Expenditure and Exercise
- Glucose Absorption
- Heart and ECG
- Heart and Peripheral Circulation

Mechanics of Ventilation

Peripheral Nerve Function

**Reflexes and Reaction Times** 

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- Heart Sounds
- Kidney and Urine

Sensory Illusions

Spinal Reflexes

Stroop Test

Water Balance

Muscle and EMG

Sensory Physiology

**Skeletal Muscle Function** 

• Lung Volumes

#### **Key:** • Pre-loaded in panels • Distance Learning version available • Alternative data • Unavailable

# **Exercise Physiology**

- Aerobic Fitness Testing
- Anaerobic Fitness Testing
- Cardiorespiratory Effects of Exercise
- Cardiovascular Effects of Exercise
- Energy Expenditure and Exercise
- Energy Metabolism
- Introduction to Fitness Testing

# Neuroscience

- Autonomic Nervous System
- Biofeedback
- Cockroach Sensory Nerve
- Cockroach Ventral Nerve Cord
- Diving Response
- Earthworm Action Potentials
- Electrodermal Response (EDR)
- Electroencephalography (EEG)
- EDR and Classical Conditioning
- Electrooculography (EOG)
- Frog Nerve
- Frog Neuromuscular Junction
- Intracellular Action Potentials
- Muscle and EMG
- Peripheral Nerve Function
- Reflexes and Reaction Times
- Sensory Illusions
- Sensory Physiology
- Size-Weight Illusion
- Skeletal Muscle Function
- Spinal Reflexes
- Stroop Test
- Visual Evoked Potential (VEP)

### Nursing

- Blood Pressure
- Childbirth
- COPD
- Diabetes Complications
- Febrile Illness
- Heart Failure
- Muscular Dystrophy
- Myasthenia Gravis
- Myocardial Infarction
- Peripheral Vascular Disease
- Pregnancy
- Renal Failure
- Stroke
- Type 1 Diabetes

# Pharmacology

- Airways Resistance
- Chick Biventer Cervicis
- Mammalian Atria
- Mammalian Diaphragm
- Mammalian Heart
- Mammalian Jejunum
- Mammalian Uterus
- Stimulated Ileum
- Stimulated Rat Vas Deferens
- Toad Rectus Abdominis
- Unstimulated Ileum
- Unstimulated Rat Vas Deferens
- Vascular Resistance
- Vascular Smooth Muscle

# **Preclinical Medicine**

- Airflow
- Autonomic Nervous System
- Blood Pressure
- Body Temperature
- Brain Structure and Reflexes
- Glucose Absorption
- Heart and ECG
- Heart and Peripheral Circulation
- Heart Sounds
- Kidney and Urine
- Lung Volumes
- Muscle and EMG
- Peripheral Nerve Function
- Skeletal Muscle Function

# Psychophysiology

- Biofeedback
- Diving Response
- EDR and Classical Conditioning
- Electrodermal Response (EDR)
- Electroencephalography (EEG)
- Electrooculography (EOG)
- Introduction to Psychophysiology
- Muscle and EMG
- Reflexes and Reaction Times
- Sensory Illusions
- Sensory Physiology
- Size-Weight Illusion
- Visual Evoked Potentials





# How can Lt help?

#### Educators

#### Easy lesson authoring

Building media-rich lessons is simple. Drag-and-drop a range of content types to create interactive exercises, including multiple choice questions, short-form written answers, and image annotation.

#### Collaborative

Share content and workload with your fellow educators and teaching assistants. Set varying levels of access to allow others to review content, add content, or publish revisions online.

#### **Flexible grading**

Automatically grade quizzes while keeping the flexibility to add feedback and positive reinforcement, and manually grade written assessments.

#### Onboarding

Our Instructional Design team can convert and edit your existing content and lessons to make them even better in Lt.

#### Administration

#### Simple setup

Lt needs only an internet browser to allow course administration, authoring, and publishing. Our data acquisition app, used for sampling, installs in 30 seconds.

#### Analytics

Our analytics allow you to view class progress in each lesson and across your course, and provide valuable insights about how students are interacting with course material.

#### Secure and scalable

Totally secure, Lt is hosted on Amazon Web Service's encrypted servers with guaranteed 99% uptime and the ability to maintain speed as more students login to Lt.

#### Students

#### Learn anywhere

Lt's cloud-based platform means students can learn on almost any device that connects to the internet. Whether they use iOS or Android, tablet, mobile, or laptop, lessons will be resized and optimized to look great.

#### **PowerLab integration**

In the lab, students can record and view their own physiological signals live on screen with PowerLab and sampling panels in Lt that can record Pulse, Spirometry, ECG, Blood Pressure, and more.

#### Learn from real patients

For future health professionals, our patient cases allow students to follow a real patient from initial presentation to diagnosis and management. Expert healthcare professionals provide their views throughout the journey and students can practice note-taking and reflection.

#### **Future-proof**

Lt is automatically updated with new features by our team of engineers, developers, and education specialists.

#### **Getting started with Lt**

#### Custom training and specialist support

Whether you need help with lab installation and setup, IT training, Lt training, or specialized support, we can get you up and running even faster with an add-on package of training and support services.



Visit our website or contact your local ADInstruments representative for more information

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