Constructor Practice Science Labs

Hardware Requirements Documentation

To deliver a high-quality, immersive learning experience, Constructor Practice Science Labs requires devices that meet the following minimum and recommended hardware specifications across VR, PC, and tablet platforms.

1. VR Requirements

Supported VR Headsets
- Meta Quest
- Meta Quest 2
- Meta Quest 3
- Meta Quest 3S
- Meta Quest Pro
- Pico 4
- Pico 4 Ultra
- Pico Neo 3
- Pico Neo 4 Enterprise
- HTC Vive Focus 3
- HTC Vive XR Elite

Minimum Recommended VR Requirements
- VR headset with motion controllers
- Stable Wi-Fi connection (20 Mbps or higher recommended)
- Device updated to latest supported firmware

2. PC Requirements

Minimum Component Specifications
- **Operating System:** Windows 10 64-bit or newer / macOS 64-bit
- **CPU:** Intel i3-6100 / AMD Ryzen 3 120 / AMD FX-4350 or greater
- **Memory (RAM):** 8GB or more
- **Minimum Graphics Card:** NVIDIA GeForce GTX 1050 (3GB) / AMD Radeon RX 480 or greater

Recommended Component Specifications
- **CPU:** Intel i5-4590 / AMD Ryzen 5 150X or greater
- **Graphics Card:** NVIDIA GeForce GTX 1060 (3GB) / AMD Radeon RX 480 or greater
- **Memory:** 16GB RAM recommended for optimal performance
- Additional Notes:

- Dedicated GPU strongly recommended.
- Latest GPU drivers required.
- Wired internet connection recommended for best stability.

3. Tablet Requirements

iPad Compatibility
- iPad 6th Generation (Released in 2018) or newer
- iPad Pro (all supported models)
- iPadOS 15.3.1 or newer recommended for best performance

Android Tablet Compatibility
- Qualcomm Snapdragon 850 processor (or equivalent)
- Android 9.0 (Pie) or later
- GPU must support OpenGL ES 3.0 or later

General Performance Recommendations
- Use updated operating systems and firmware
- Ensure stable internet connection (minimum 20 Mbps recommended)
- Close background applications during experiments
- Use recommended hardware for multi-user or high-complexity simulations