




## OpenBlocks (VR Building Game) — Tutorial

**OpenBlocks** is a virtual reality sandbox where you build using simple geometric pieces (primitives), similar to LEGO—but in full 3D space around you.

This version goes deeper, especially into **how primitives work and how to use them effectively** 

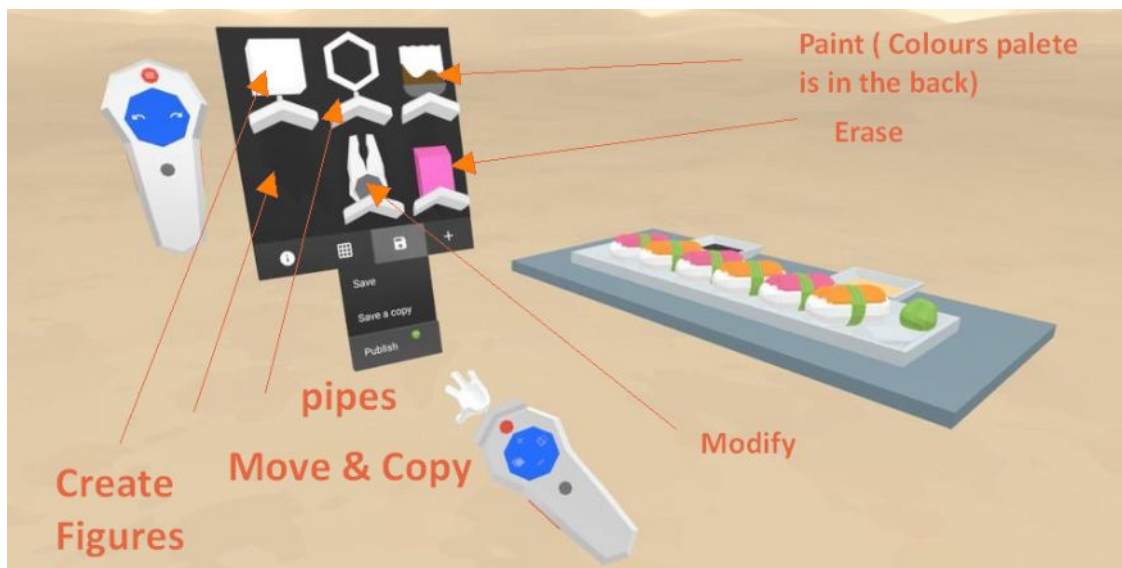
### 1. Understanding the Core Idea

In OpenBlocks, everything is built from **primitives**:

- Simple shapes you combine to create complex structures

Mastering primitives = mastering the whole app

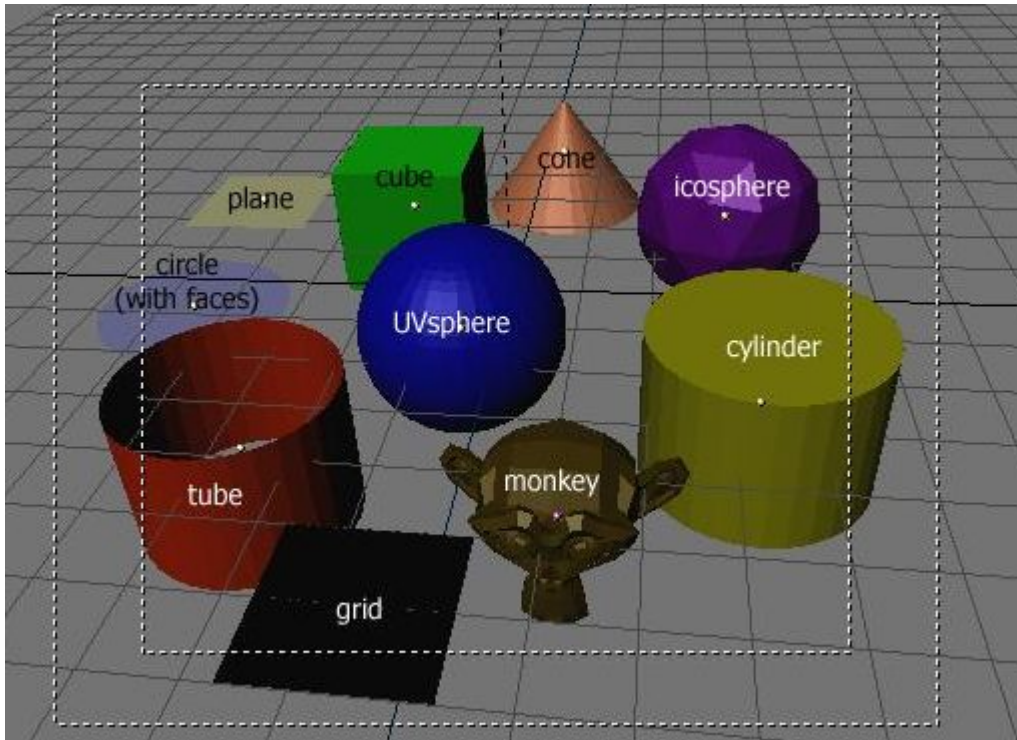
### 2. Basic Controls (Quick Recap)



- **Trigger** → Place blocks
- **Grip** → Grab / move / scale
- **Joystick** → Move around

- **Menu button** → Open tools

## 3. Primitives



### 1. Cube

- The most used shape
- Perfect for:
  - Walls
  - Floors
  - Buildings

Tip: Think of cubes as “pixels in 3D”

### 2. Rectangular Block (Scaled Cube)

- A stretched cube
- Great for:
  - Beams
  - Long walls
  - Platforms

Tip: Use fewer large blocks instead of many small ones

### 3. Cylinder

- Circular shape

- Ideal for:
  - Columns
  - Towers
  - Pipes

Tip: Combine with cubes for architectural forms

## 4. Sphere

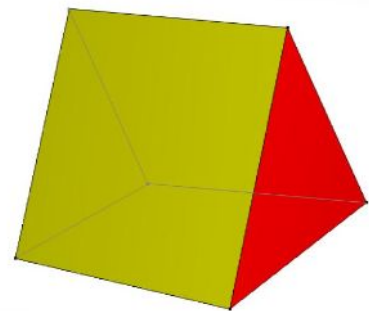
- Smooth round shape
- Good for:
  - Domes
  - Decorations
  - Organic forms

Tip: Often used in combination (half-sphere = dome)

## 5. Ramp / Wedge

- Sloped surface
- Useful for:
  - Roofs
  - Stairs
  - Inclines

Tip: Rotate it to get different angles



## 4. How to Use Primitives Effectively

### 1. SCALING

- Grab a block and stretch it
- Make it:
  - Thin → walls
  - Wide → floors
  - Tall → towers

Scaling is more powerful than adding new blocks

### 2. ROTATION

- Rotate primitives to:
  - Align structures
  - Create slopes
  - Add variation

👉 Especially important for ramps and cylinders

### 3. COMBINING SHAPES

Examples:

- Cube + ramp → roof
- Cylinder + cube → column + base
- Sphere + cube → dome building

Complex structures = simple shapes combined

### 4. DUPLICATION

- Copy blocks to repeat patterns
- Essential for:
  - Windows
  - Columns
  - Structures

### 5. Mini Exercise (Practice This)

Build a **simple house using primitives only**:

1. Floor → flat cube
2. Walls → stretched cubes
3. Roof → ramps
4. Door → leave a gap
5. Windows → small holes or different color blocks

This teaches 90% of what you need

### 6. Color & Structure

- Assign colors to different parts:
  - Floor → one color
  - Walls → another
  - Roof → contrast

Helps readability and design clarity

### 7. Key Mindset Shift

- Don't think: *"I need a detailed object"*
- Think:
  - 👉 *"How can I build this using simple shapes?"*

## Final Tips

- Start big, then refine
- Use fewer, smarter blocks
- Move around your model constantly
- Think in volume, not surfaces