

The Locker Game

The Locker Problem

The new school has 100 lockers for 100 students. On the first day of school, the students meet outside the building and agree on the following plan: The first student will enter the school and open all the lockers. The second student will then enter the school and close every locker with an even number (2, 4, 6, 8,...). The third student will then “reverse” every third locker. That is, if the locker is closed, it will be opened; if the locker is open, it will be closed. The fourth student will reverse every fourth locker, and so on until all 100 students in turn have entered the building and reversed the proper lockers.

Which lockers will finally remain open?



Problem Statement

Game

Game Link

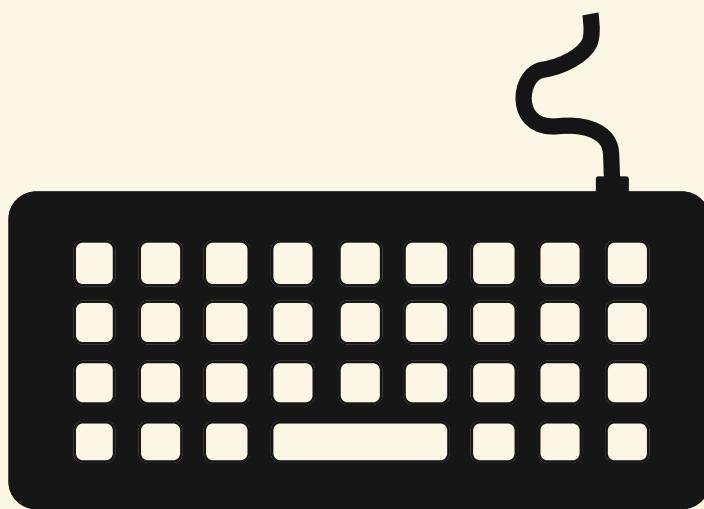
[How to play](#)

Game Link to Unity Play
(recommended for mobile)

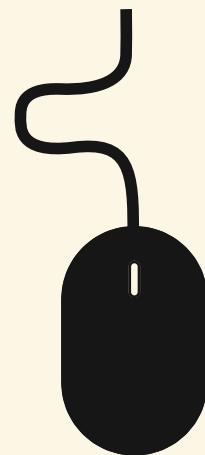


The Locker Game

Controls



**Keyboard
and Mouse**



OR

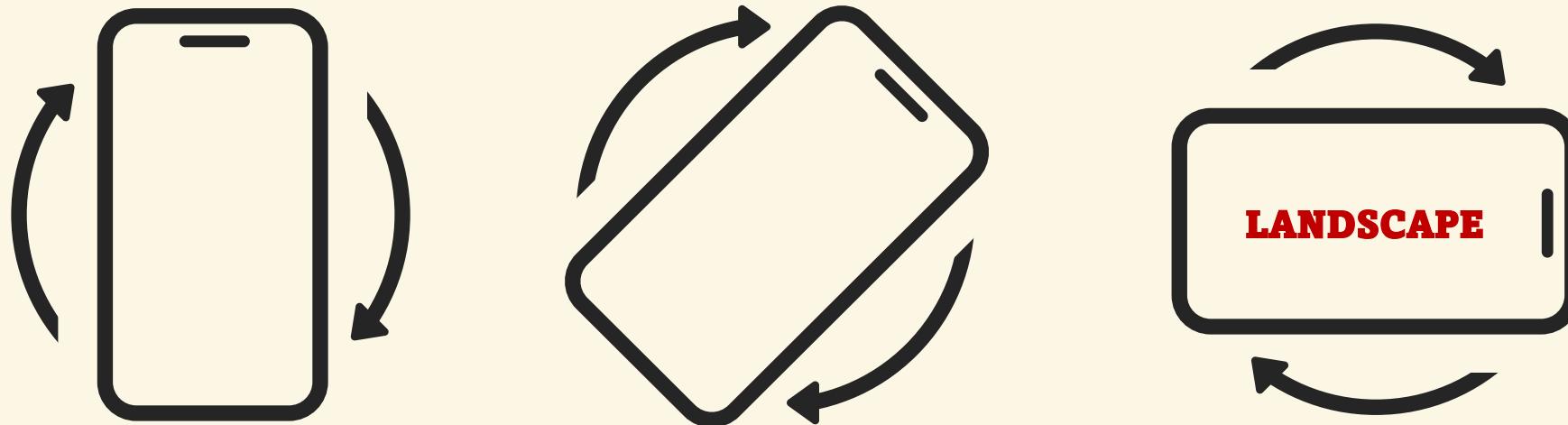


Touch



The Locker Game

Mobile User (Tablet/Cellphone) plays in landscape orientation



The Locker Game

How to play:

1. **Click** on  to start the game.

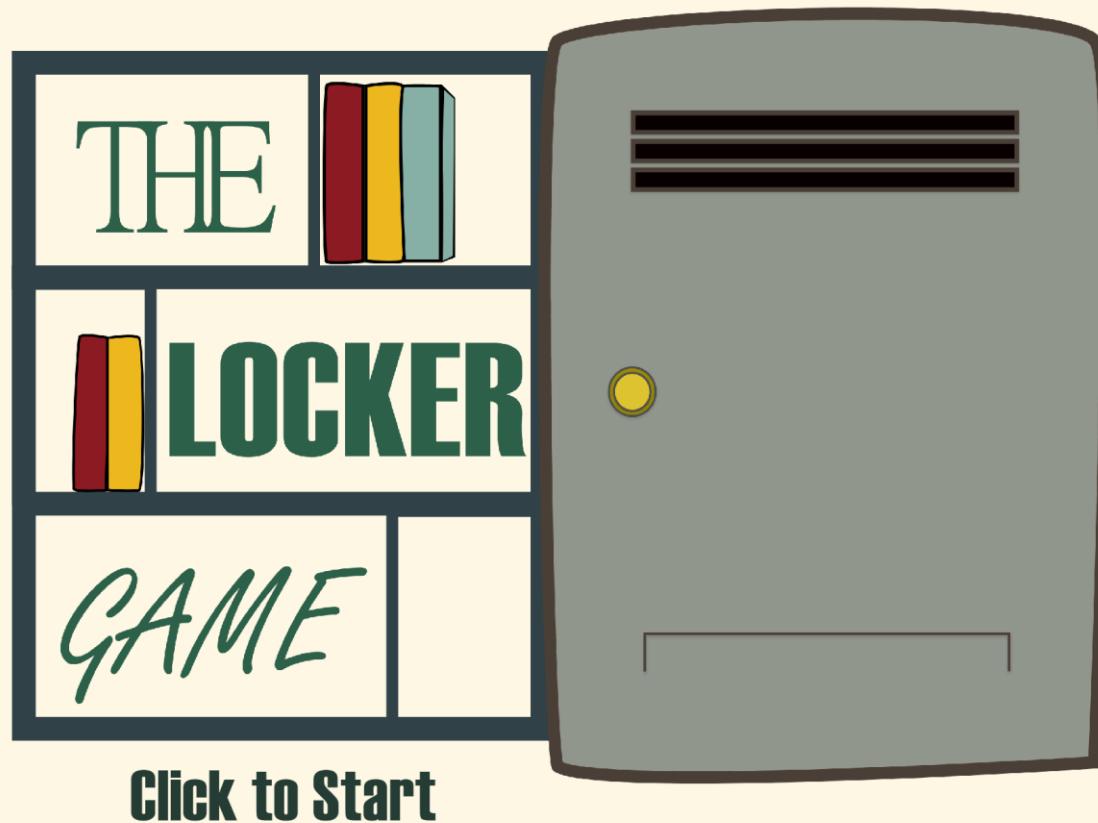
**If in Unity Play (access through Game Link).*



The Locker Game

How to play:

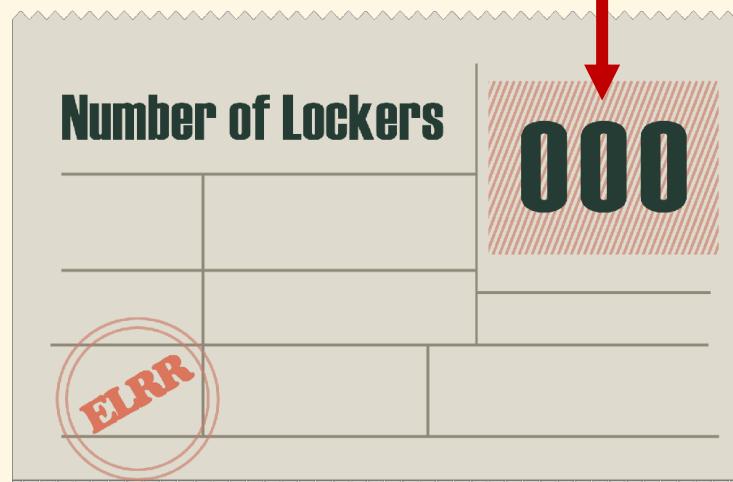
2. Right-Click, Touch or Press "Enter" to play.



The Locker Game

How to play:

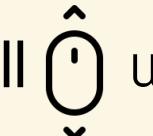
3. Choose how many lockers you want to work with (1–999) by typing the number or selecting it on the numpad, then press “Enter”.

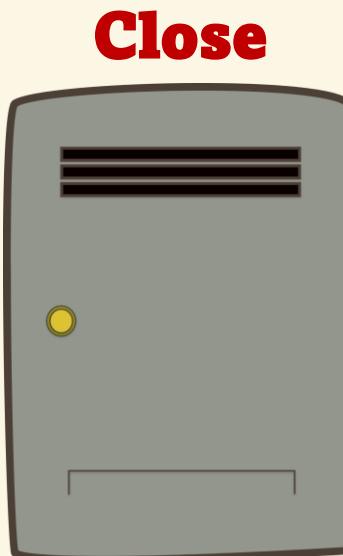
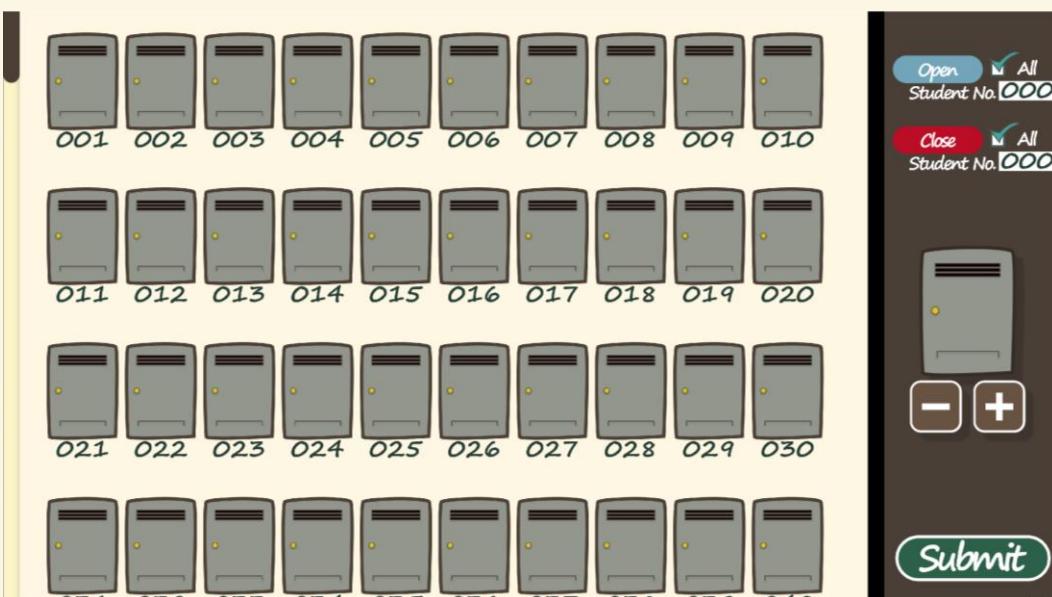


The Locker Game

How to play:

4. Click  on the individual lockers to open and close.

Scroll  up and down to navigate through the lockers.



The Locker Game

How to play:

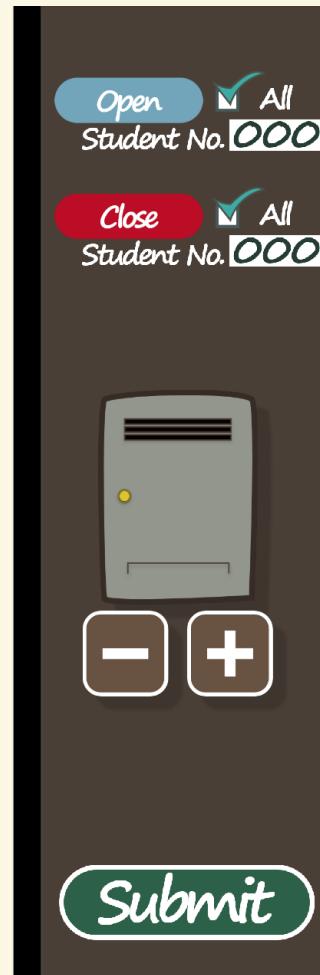
6. In-game buttons

Open

Close

**'-' remove locker
'+' add locker**

**Submit your answer
(click or press “Enter”)**



Open/Close

You can open or close multiple lockers simultaneously.

Choose “All” or select a specific student by entering their student number, then press the Open/Close button. To enter a student number, uncheck All and input the number using the keyboard or numpad.



The Locker Game

How to play:

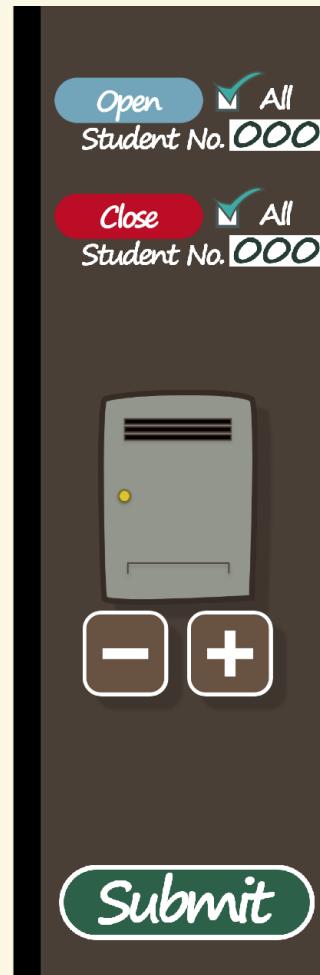
6. In-game buttons

Open

Close

**'-' remove locker
'+' add locker**

**Submit your answer
(click or press "Enter")**



Press "M" to go back to the **menu**.

**If using keyboard*

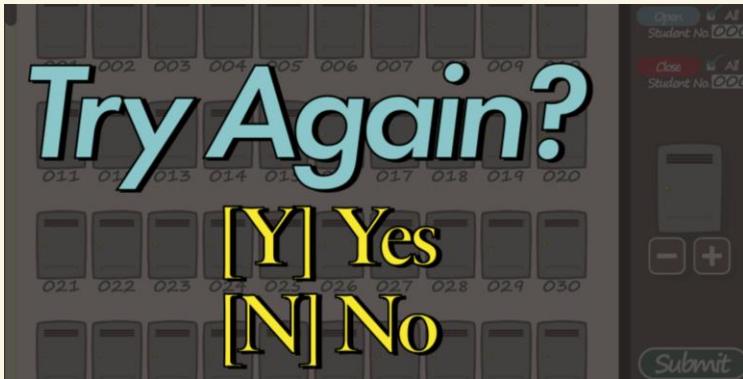
Or refresh to start again.



The Locker Game

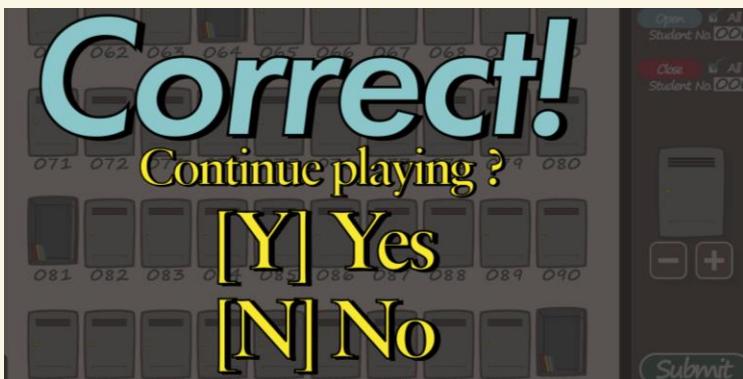
How to play:

7. Feedback: Try Again? vs. Correct!



To continue playing after submitting your answer, press “Y” or click on “[Y] Yes”.

Otherwise, press “N” or click on “[N] No”.



**Thank you for playing
The Locker Game**

