

Math Snacks: Pearl Diver



Pearl Diver is a fun game that helps students learn the number line while diving for pearls amidst the sunken ships. This game is perfect for students in grades 3-8 who need to practice locating points on a number line. The number line starts out going from 1 to 10, but by the final game level, the number line runs from -5 to 5 with whole numbers, fractions, mixed numbers, and decimals scattered throughout. The Sushi round offers the player a chance to use their approximation skills when they are asked to cut the deadly eel in halves, thirds, and quarters. So put on your diving mask and jump in!

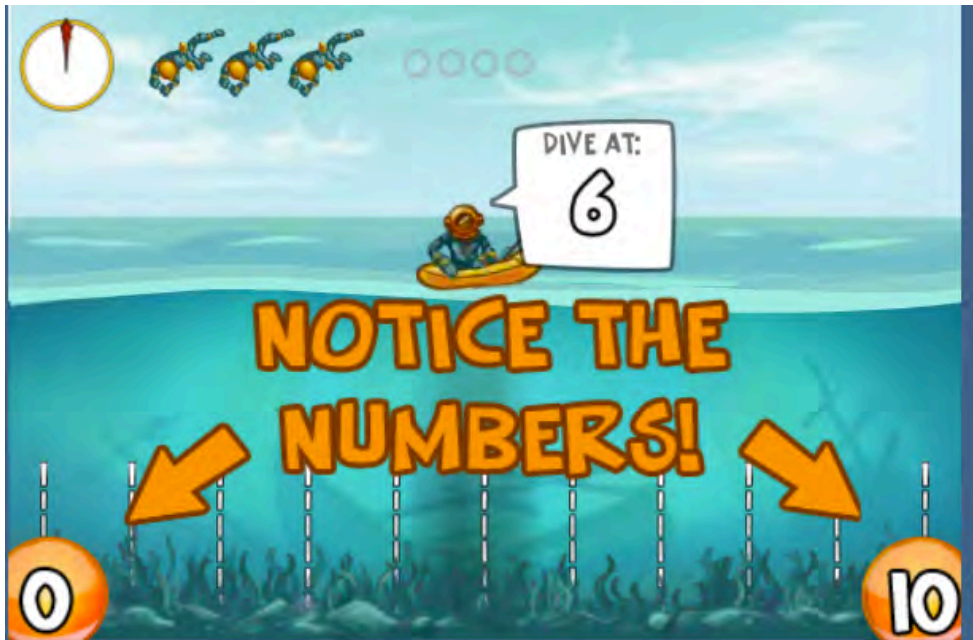
How to Play

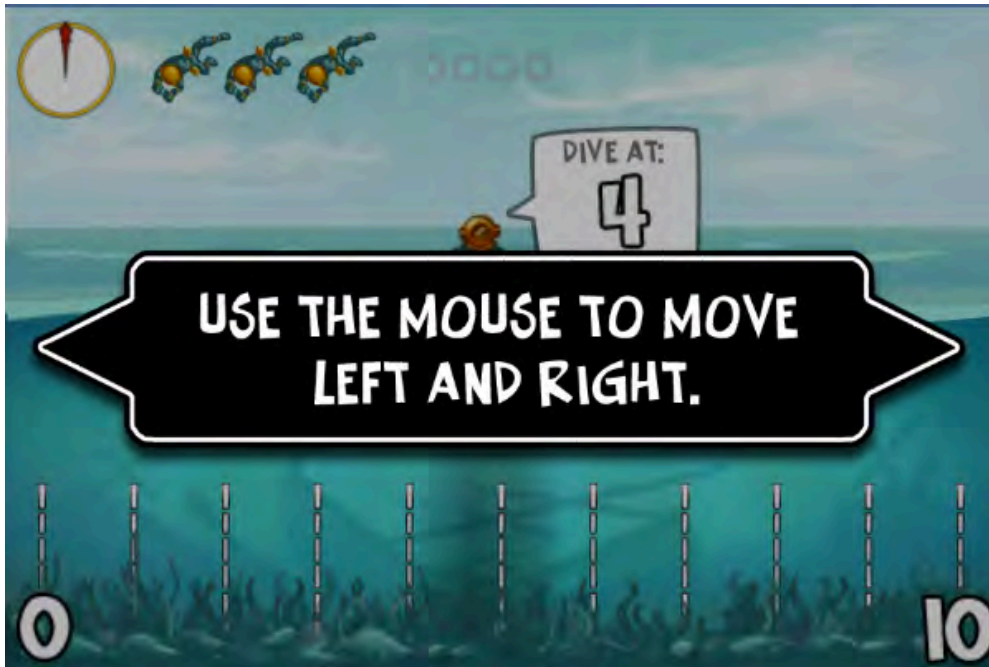
The goal of the game is to send your diver down to the bottom of the ocean to open the oysters and find the pearls (not the old boots). Watch out for the electric eels!

Start by clicking "Play the Game" from the Title Screen:



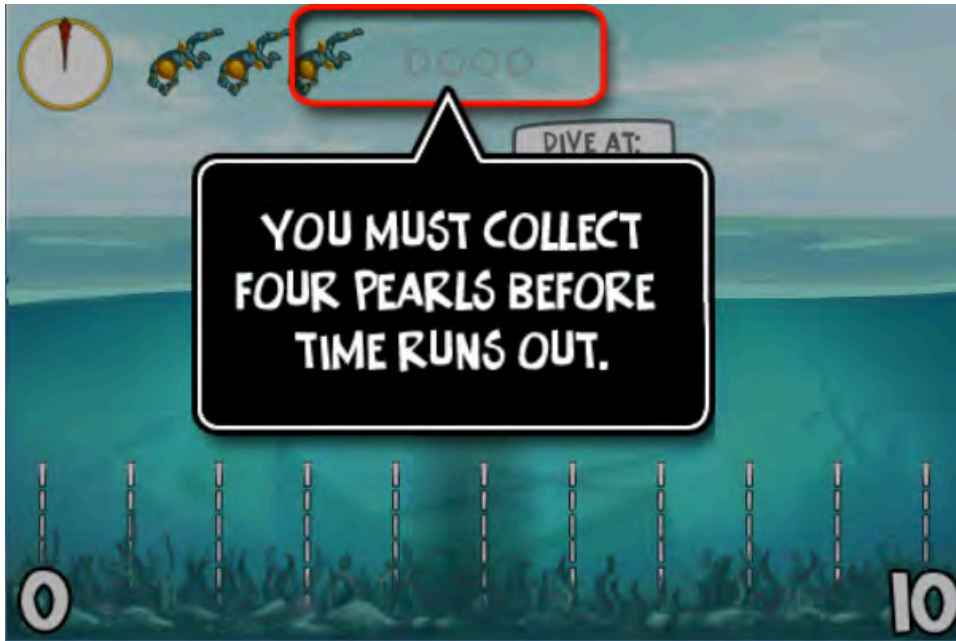
The game introduces the number line, starting from 0 to 10. The vertical, dashed white lines indicate where the interim numbers would be:





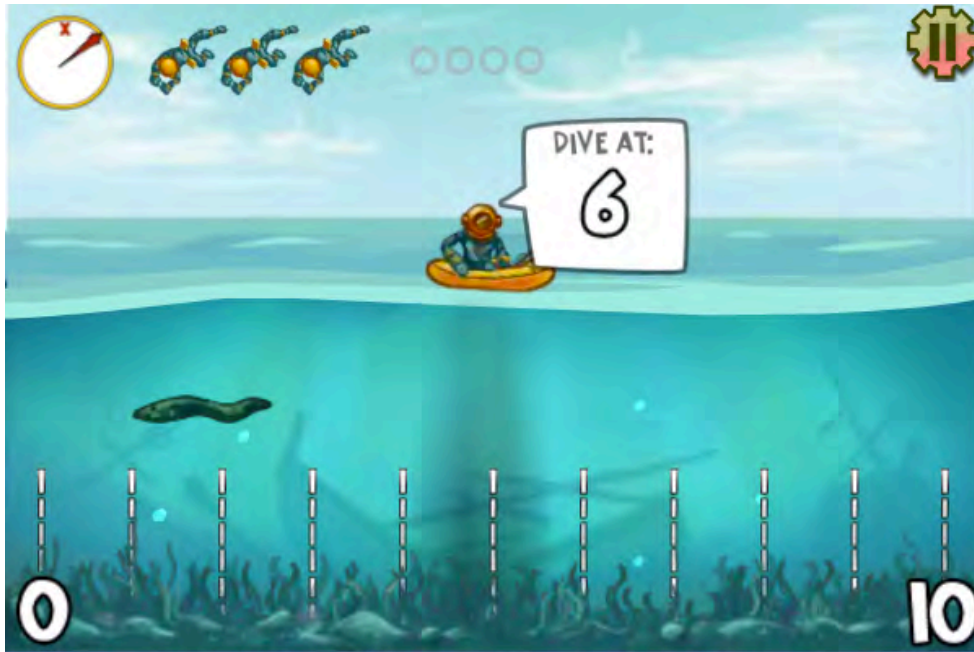
Click the mouse anywhere on the screen to move to the next instruction screen.



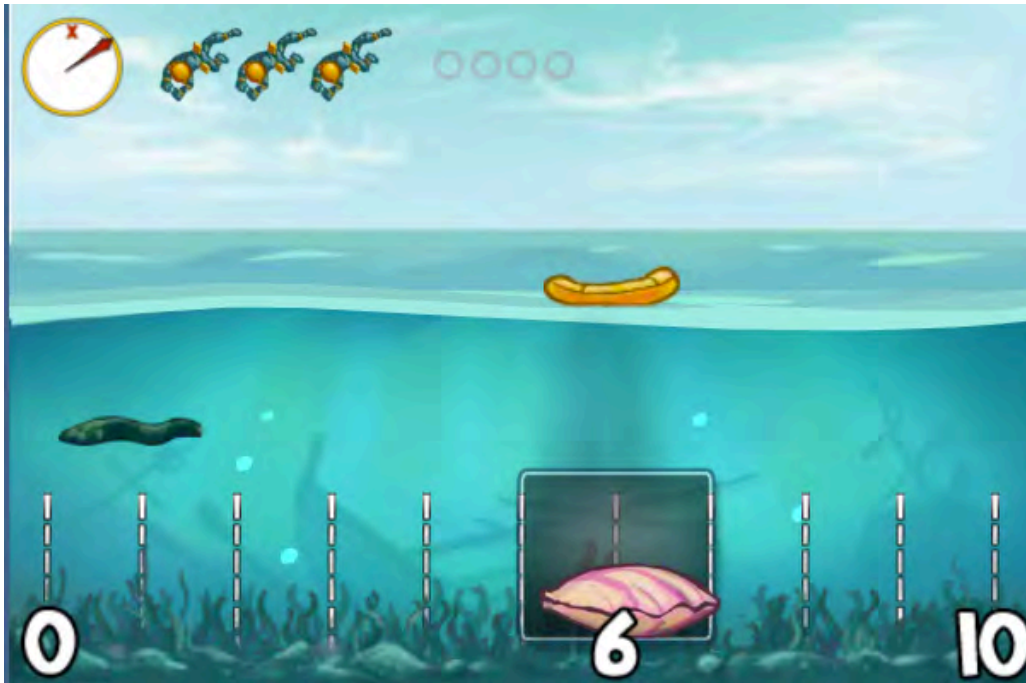


The timer is shown in the upper left corner of the screen. You are the diver on the boat.

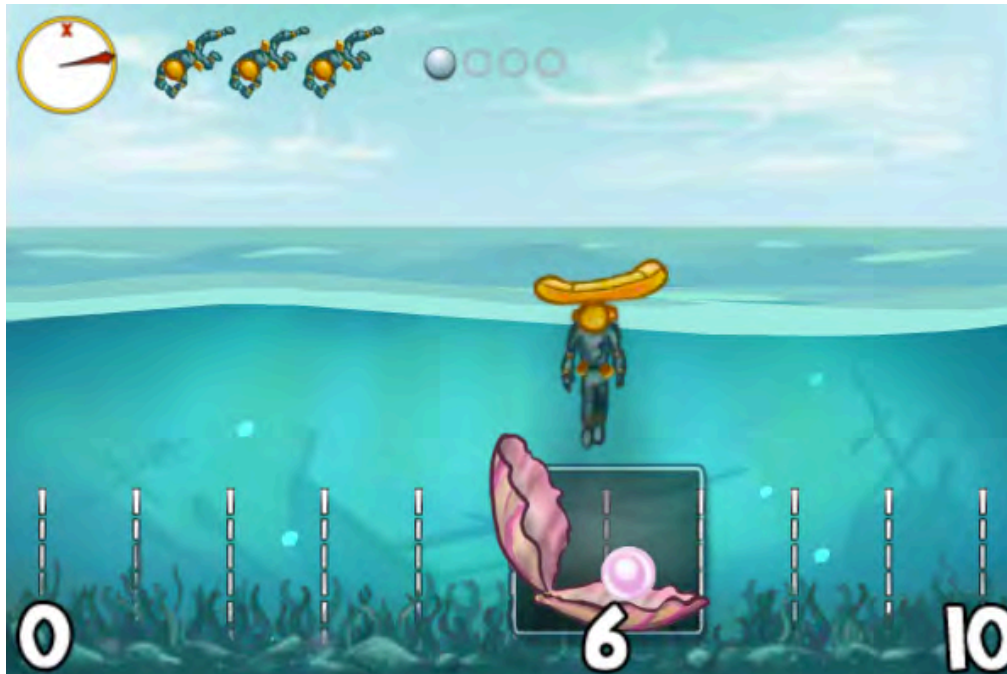
Click on the vertical, dashed white line on the number line that corresponds to the number that you are assigned:



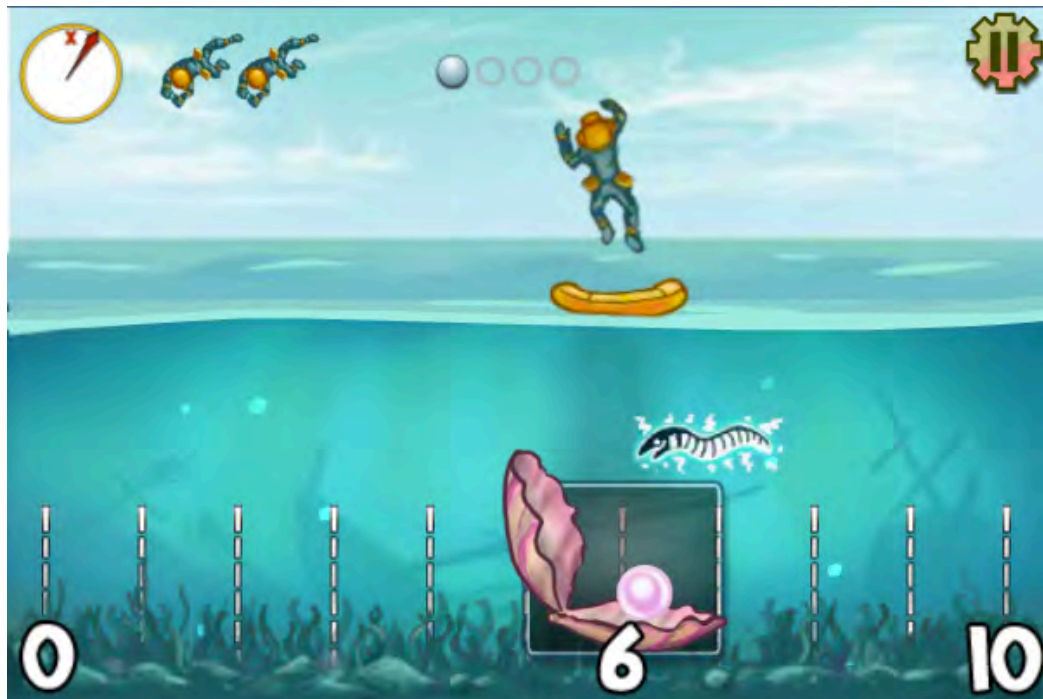
When you click on a dashed white line, the diver dives down that line, and an oyster and a number pop up on the number line:



Click on the oyster to get it to open. **Click four times** to get it to open all the way and release the diver:

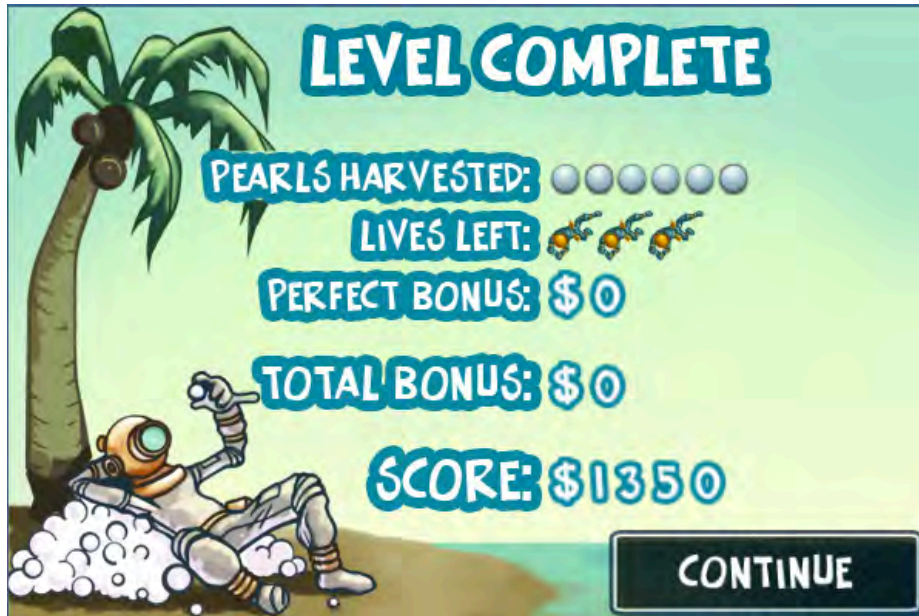


But watch out for the electric eel! He will zap you right out of the water:



You have three "lives" (indicated by the three diver icons next to the timer) before the game will end. You lose a life every time you get zapped by an electric eel.

If the timer runs out before you run out of lives, you'll find out how well you did. Notice that almost as soon as the Perfect Bonus and Total Bonus amounts are calculated (the numbers go up), those amounts get added to the final score at the bottom and reset to \$0 (the numbers go down):



Sushi Round:

SUSHI ROUND

SUSHI TIME! YOU HAVE TO CUT THE EEL!
THE CLOSER YOU GET, THE MORE MONEY YOU EARN!



CLICK TO START

The image is a game interface for a 'Sushi Round'. It features a teal background with a dark teal rounded rectangle at the top containing the title 'SUSHI ROUND' in large white letters. Below the title, two lines of white text read 'SUSHI TIME! YOU HAVE TO CUT THE EEL!' and 'THE CLOSER YOU GET, THE MORE MONEY YOU EARN!'. In the center, there is a framed illustration of a sushi bar. On the bar, there is a whole fish, a piece of eel, and several sushi rolls. Below the illustration, the text 'CLICK TO START' is written in white. The background of the entire interface has a subtle pattern of blue and green lines, suggesting an underwater or aquatic theme.

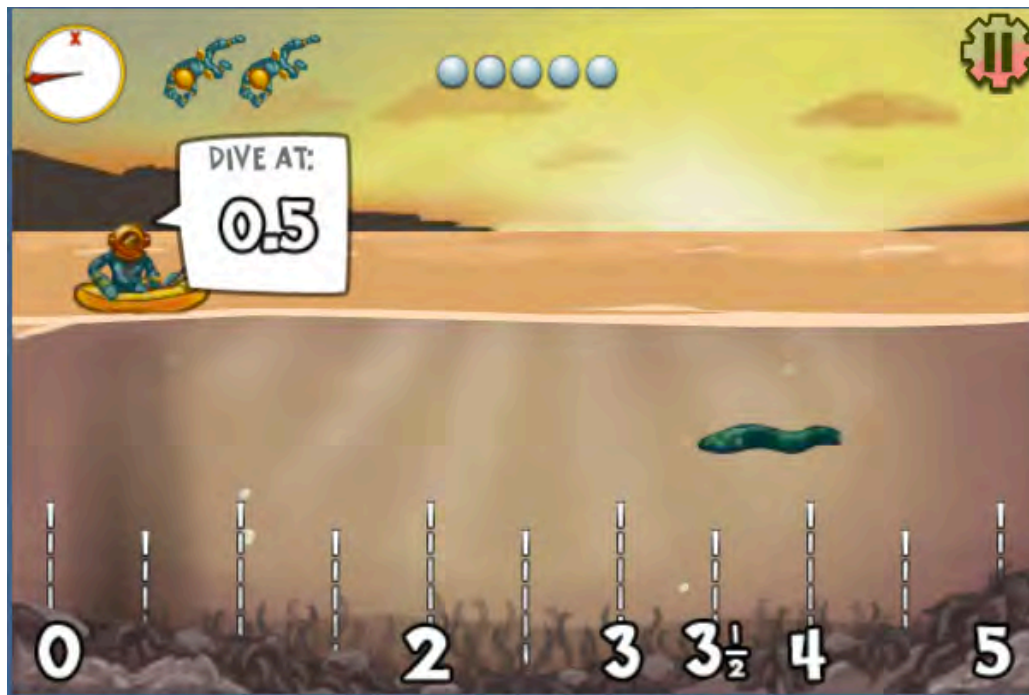
Time for some revenge on that electric eel! In the Sushi Round, you must estimate where to cut the eel according to the instructions given. Use the mouse to slide the knife left or right, then click the mouse to make the cut:



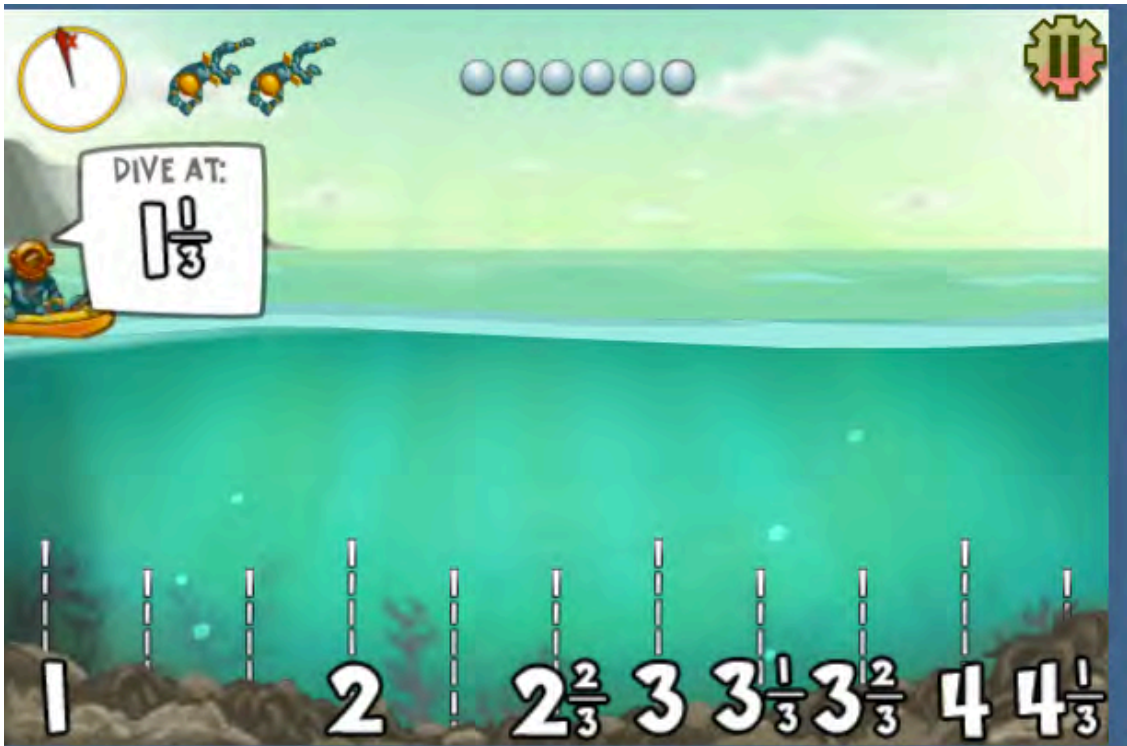
Notice with the scoring that as you earn money points, they are immediately added to the score on the top of the screen, and the amount in the dollar area (above the word "target") runs down to zero. Your money has been added to the total score!

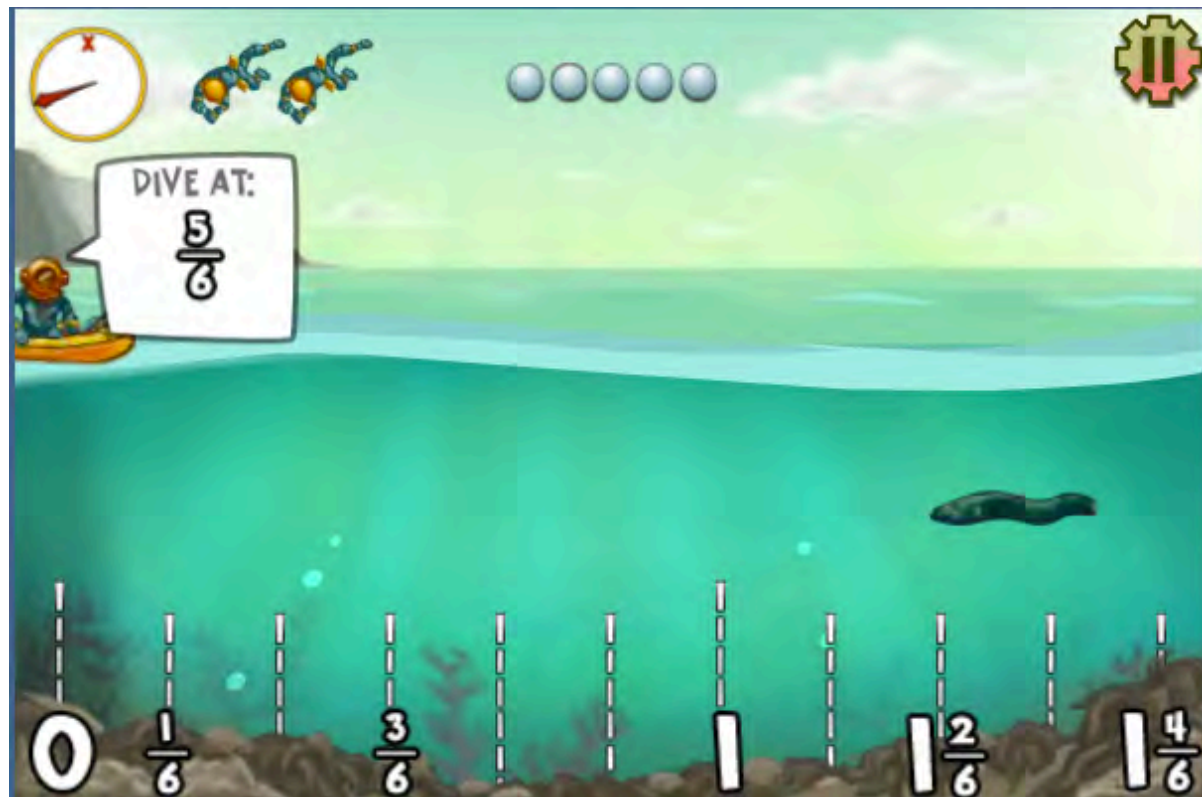


The levels of Pearl Diver get increasingly more difficult. Here are some of the types of number lines that you'll see in later levels:









More information to help you teach with Pearl Diver:

Teaching with Pearl Diver (PDF):

http://mathsnacks.com/media/print/PearlDiver_teachingwith.pdf

Pearl Diver and the Common Core Standards:

<http://mathsnacks.com/pearl-diver-en.html#adcommoncore>

General Guidelines for Teaching with Math Snacks Games:

http://mathsnacks.com/teaching_edappr.html#games