Fish Chomp – Scratch
Step by Step

1 Create Big fish

Create a sprite called "Big fish"
He needs 2 costumes – one with mouth open and one with mouth closed.
Name the costumes "Big fish open" and "Big fish closed"
Make sure the costumes have the fish facing to the right.

2 Create Little fish

Create 5 sprites called "Little fish 1" "Little fish 2" etc
They can be all the same picture or different pictures.
Each sprite has one costume only.
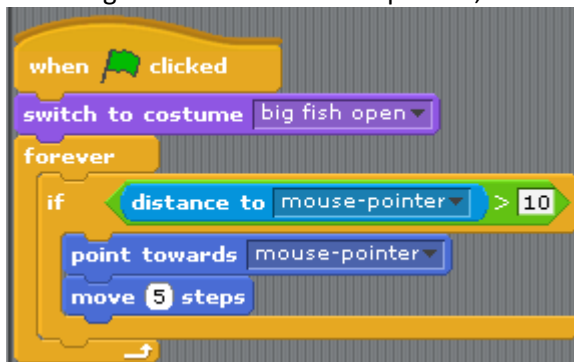Make sure the costumes have the fish facing to the right.

3 Make a background

Make a Stage Background.
There is a standard "underwater" scene with Scratch, or save an underwater picture from the Internet.

4 Big fish swims

Big fish:
Make Big fish follow the mouse pointer, with his mouth open.

```
when [green flag] clicked
switch to costume [big fish open ▾]
forever
    if < distance to [mouse-pointer ▾] > 10 >
        point towards [mouse-pointer ▾]
        move 5 steps
```

Step 4 TEST: Click the green flag. Big fish should now follow your mouse pointer around.

5 Little fish swims (awww)

Little fish 1:
We'll work only on Little fish 1 and when he's completely right, we'll copy his scripts to the other little fish.
Make the little fish move in a slightly random way.

```
when [green flag] clicked
show
point in direction (90 ▾)
forever
    move 2 steps
    turn ↻ (pick random -20 to 20) degrees
```

Step 5 TEST: Click the green flag. Little fish 1 should swim in a wobbly way. He will probably get stuck when he hits the edge.

6 Little fish bumps (ouch!)

Little fish 1:

Make the little fish bump and swim the other way when they hit the edge.

```
when [green flag] clicked
show
point in direction 90
forever
    move 2 steps
    turn (pick random -20 to 20) degrees
    if on edge, bounce
```
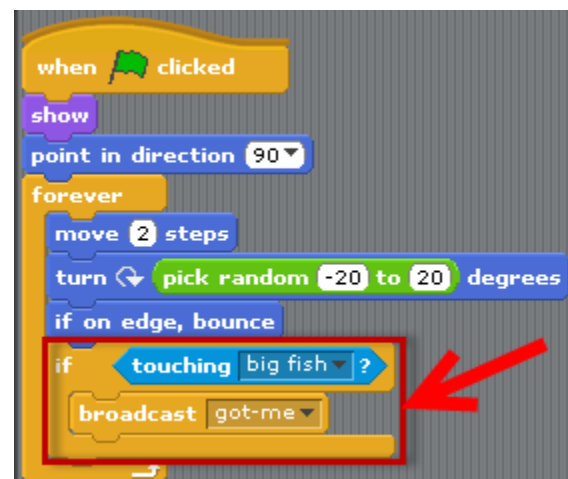
Step 6 TEST: Click the green flag. Little fish 1 should now bump away from the edge and keep on swimming!

7 Big fish chomps

Little fish 1:

Send a signal called "got-me" when the Big fish and the Little fish are touching.

Insert the new block of code highlighted.

```
when [green flag] clicked
show
point in direction 90
forever
    move 2 steps
    turn (pick random -20 to 20) degrees
    if on edge, bounce
    if <touching big fish ?>
        broadcast got-me
```

Big fish:

When the "got-me" signal is received, play a sound, close mouth, open mouth.

Insert the new block of code highlighted.

```
when [green flag] clicked
switch to costume big fish open
forever
    if <distance to mouse-pointer > 10>
        point towards mouse-pointer
        move 5 steps

when I receive got-me
play sound Laser1
repeat 2
    switch to costume big fish closed
    wait 0.3 secs
    switch to costume big fish open
```
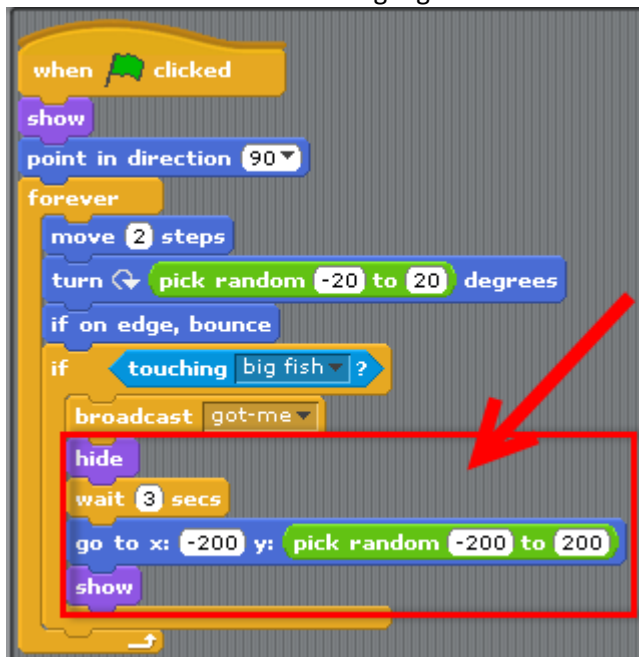
Step 7 TEST: Click the green flag. When Big fish swims over Little fish, Big fish should close and open mouth, and a sound should play.

8 Little fish vanishes & born again!

Little fish 1:

When Little fish touches big fish, make Little fish disappear and reappear on the left of the screen in a slightly random spot.

Insert the new block of code highlighted.

Step 8 TEST: Click the green flag. When Big fish swims over Little fish, Little fish should disappear, then 3 seconds later reappear on the left side of the screen.

9 Clone Little fish 1

Little fish 1:

Now you will make all the Little fish behave just like Little fish 1.

Make sure you're clicked on Little fish 1.

Grab the green flag at the top of the code block, drag and drop onto the sprite for Little fish 2.

Then click on Little fish 2 and check to make sure all your code was copied.

Repeat for Little fish 3, Little fish 4, Little fish 5

Step 9 TEST: Click the green flag. All the little fish should be swimming. When Big fish eats any little fish, it should disappear, then 3 seconds later reappear on the left side of the screen.