



1
00:00:07,760 --> 00:00:02,300
so it's not going to angle slightly this

2
00:00:11,810 --> 00:00:07,770
way still pouring in the middle have

3
00:00:18,170 --> 00:00:11,820
your water alright but five degree angle

4
00:00:20,859 --> 00:00:18,180
I would say and I would anticipate that

5
00:00:24,279 --> 00:00:20,869
would make a counterclockwise rotation

6
00:00:27,580 --> 00:00:24,289
so let me just add a few pepper flakes

7
00:00:29,259 --> 00:00:27,590
you can see the rotations there already

8
00:00:34,090 --> 00:00:29,269
obviously it's going to go

9
00:00:47,060 --> 00:00:34,100
counterclockwise take this vertically

10
00:00:48,979 --> 00:00:47,070
counter clockwise so this time I'm going

11
00:00:50,660 --> 00:00:48,989
to angle it slightly this direction as

12
00:00:54,650 --> 00:00:50,670
little as possible doesn't take very

13
00:01:00,110 --> 00:00:54,660

much and pour again very slightly angled

14

00:01:07,100 --> 00:01:00,120

to the right to your left which will

15

00:01:09,140 --> 00:01:07,110

create the vortex and you can see that's

16

00:01:11,600 --> 00:01:09,150

a creating too but the larger vortex is

17

00:01:13,460 --> 00:01:11,610

on this side so the net result that

18

00:01:22,490 --> 00:01:13,470

think is going to be a clockwise

19

00:01:26,870 --> 00:01:22,500

rotation let's see looks like this

20

00:01:31,010 --> 00:01:26,880

vortex actually along but it's just leap

21

00:01:32,810 --> 00:01:31,020

wrangle interesting so if you for it

22

00:01:38,590 --> 00:01:32,820

more in the middle you create these two

23

00:01:41,770 --> 00:01:40,210

so it's kind of interesting in the last

24

00:01:43,470 --> 00:01:41,780

experiment I found that if I did it too

25

00:01:46,060 --> 00:01:43,480

straight it creates these two vortices

26
00:01:47,710 --> 00:01:46,070
which interact with each other and one

27
00:01:49,390 --> 00:01:47,720
of the men's that decaying and the other

28
00:01:50,500 --> 00:01:49,400
one becomes more dominant or they cancel

29
00:01:53,590 --> 00:01:50,510
each other out they'll both decay

30
00:01:56,320 --> 00:01:53,600
eventually so you need to have a certain

31
00:01:58,630 --> 00:01:56,330
amount of angle to be able to get this

32
00:02:00,280 --> 00:01:58,640
vortex large enough to overcome the

33
00:02:01,780 --> 00:02:00,290
power of this vortex same thing in that

34
00:02:03,640 --> 00:02:01,790
direction it works you saw in the first

35
00:02:06,250 --> 00:02:03,650
video that I had an angle about whether

36
00:02:08,500 --> 00:02:06,260
there maybe 10 5 to 10 degrees in this

37
00:02:13,330 --> 00:02:08,510
direction some can do the same in this

38
00:02:20,400 --> 00:02:13,340

direction all right here we go okay push

39

00:02:22,690 --> 00:02:20,410

it in that direction and let's add our

40

00:02:29,500 --> 00:02:22,700

contrast material which is some red

41

00:02:31,510 --> 00:02:29,510

pepper flakes and now we see we still

42

00:02:33,220 --> 00:02:31,520

have a little bit of stillness over here

43

00:02:35,740 --> 00:02:33,230

that we have a larger vortex which is

44

00:02:38,020 --> 00:02:35,750

taken over the whole thing we could let

45

00:02:39,190 --> 00:02:38,030

this down for a while I think you can

46

00:02:41,590 --> 00:02:39,200

see there's actually a counter rotating

47

00:02:42,810 --> 00:02:41,600

vortex over here but the larger vortex

48

00:02:45,220 --> 00:02:42,820

is over here

49

00:02:47,530 --> 00:02:45,230

and of course if I pull the plug at now

50

00:02:50,440 --> 00:02:47,540

is going to give me the clockwise spiral

51
00:02:52,510 --> 00:02:50,450
down which is you know what you'd expect

52
00:02:55,479 --> 00:02:52,520
so that's the trick you just need to

53
00:02:57,670 --> 00:02:55,489
have a sufficient tilt in the direction

54
00:02:59,199 --> 00:02:57,680
you want it to go about that much or

55
00:03:00,910 --> 00:02:59,209
about that much which is exactly what we

56
00:03:02,380 --> 00:03:00,920
see in the videos so I'm going to pull

57
00:03:10,470 --> 00:03:02,390
this out now and share the clockwise

58
00:03:17,870 --> 00:03:10,480
cortex going down the drain there we go