

# Food Chain

Aim: Animate a Food Chain

Type **Food Chain** in Backdrop

Sprites from Library

Cat

```

when clicked
  go to x: 135 y: 105
  point in direction 90
  forever
    repeat 3
      wait 0.2 secs
      next costume
      move 10 steps
    repeat 3
      wait 0.2 secs
      next costume
      move -10 steps
  
```

Parrot

```

when clicked
  go to x: -180 y: 95
  set size to 75 %
  forever
    wait 0.2 secs
    next costume
  
```

Frog

```

when clicked
  go to x: -165 y: -70
  forever
    wait 0.2 secs
    next costume
  
```

Ladybug

```

when clicked
  go to x: -30 y: -130
  set size to 50 %
  forever
    wait 0.2 secs
    next costume
  
```

Grass (use top of palm tree)

```

when clicked
  go to x: 165 y: -130
  forever
    wait 0.2 secs
    next costume
  
```

Link



Create **More Blocks** called **link** with 4 numbers **direction x y steps**

```

when clicked
  set pen size to 2
  set pen color to red
  forever
    clear
    Link -90 140 -130 130
    Link -60 -70 -120 80
    Link 0 -170 -40 70
    Link 90 -90 95 140
    hide
    wait 1 secs
  
```

```

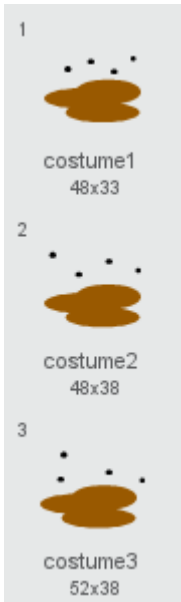
define Link direction x y steps
  wait 0.5 secs
  point in direction direction
  go to x: x y: y
  pen down
  move steps steps
  pen up
  stamp
  
```

*Save and Test*

# Food Cycle

Type **Food Cycle** in Backdrop

Replace Cat with fungus to form a cycle



```
when clicked  
go to x: 160 y: 0  
forever  
  wait 0.1 secs  
  next costume
```

Other

```
go to x: 0 y: 0
```

values might have to be modified

Edit **link** with 5 numbers **x1 y1 x2 y2 direction**

Use **glide** instead of **move**

```
when clicked  
clear  
set pen color to red  
set pen size to 3  
pen up  
forever  
  link 70 -140 -70 -140 270  
  link -130 -115 -185 -40 200  
  link -185 40 -75 100 55  
  link 60 115 145 30 15  
  link 170 -10 110 -120 95  
  wait 1 secs  
clear
```

```
define link x1 y1 x2 y2 direction  
  wait 0.5 secs  
  point in direction direction  
  go to x: x1 y: y1  
  pen down  
  glide 1 secs to x: x2 y: y2  
  pen up  
  stamp
```

*Save and Test*

# Food Pyramid

Type **Food Pyramid** in Backdrop



grass

```
when clicked
clear
go to x: 220 y: -150
show
repeat 11
  wait 0.1 secs
  stamp
  change x by -40
broadcast Beetle
```



Beetle

```
when clicked
set size to 50 %
hide

when I receive Beetle
go to x: 200 y: -100
show
repeat 5
  wait 0.1 secs
  stamp
  change x by -80
broadcast Frog
```



Frog

```
when clicked
hide

when I receive Frog
go to x: 160 y: -50
show
repeat 2
  wait 0.2 secs
  stamp
  change x by -160
broadcast Bird
```



Parrot

```
when clicked
set size to 50 %
hide

when I receive Bird
wait 0.3 secs
go to x: 80 y: 0
show
stamp
wait 0.3 secs
change x by -160
broadcast Fox
```



Fox

```
when clicked
set size to 75 %
go to x: 0 y: 100
hide

when I receive Fox
wait 0.5 secs
show
```

*Save and Test*

# Up and Down Arrows



grass



Beetle



Frog

```
when clicked
clear
hide
```

```
when up arrow key pressed
set switch to 1
go to x: 220 y: -150
clear
show
repeat 11
  wait 0.1 secs
  stamp
  change x by -40
broadcast BeetleUP
```

```
when down arrow key pressed
clear
hide
```

```
when I receive GrassDOWN
go to x: 220 y: -150
show
repeat 11
  wait 0.1 secs
  stamp
  change x by -40
```

```
when clicked
set size to 50 %
clear
hide
```

```
when up arrow key pressed
clear
hide
```

```
when down arrow key pressed
clear
hide
```

```
when I receive BeetleUP
go to x: 200 y: -100
show
repeat 5
  wait 0.1 secs
  stamp
  change x by -80
broadcast FrogUP
```

```
when I receive BeetleDOWN
go to x: 200 y: -100
show
repeat 5
  wait 0.1 secs
  stamp
  change x by -80
broadcast GrassDOWN
```

```
when clicked
clear
hide
```

```
when up arrow key pressed
clear
hide
```

```
when down arrow key pressed
clear
hide
```

```
when I receive FrogUP
go to x: 160 y: -50
show
repeat 2
  wait 0.2 secs
  stamp
  change x by -160
broadcast BirdUP
```

```
when I receive FrogDOWN
go to x: 160 y: -50
show
repeat 2
  wait 0.2 secs
  stamp
  change x by -160
broadcast BeetleDOWN
```



Parrot

```

when clicked
set size to 50 %
clear
hide

```

```

when up arrow key pressed
clear
hide

```

```

when down arrow key pressed
clear
hide

```

```

when I receive BirdUP
wait 0.3 secs
go to x: 80 y: 0
show
stamp
wait 0.3 secs
change x by -160
wait 0.3 secs
broadcast FoxUP

```

```

when I receive BirdDOWN
wait 0.3 secs
go to x: 80 y: 0
show
stamp
wait 0.3 secs
change x by -160
wait 0.3 secs
broadcast FrogDOWN

```



Fox

```

when clicked
set size to 75 %
hide

```

```

when up arrow key pressed
clear
hide

```

```

when I receive FoxUP
go to x: 0 y: 100
show

```

```

when down arrow key pressed
go to x: 0 y: 100
show
broadcast BirdDOWN

```

Add a second Stage

## Food Pyramid

## Up and Down Arrows

```

when clicked
switch backdrop to Stage2
wait 2 secs
switch backdrop to Stage1

```

*Save and Test*